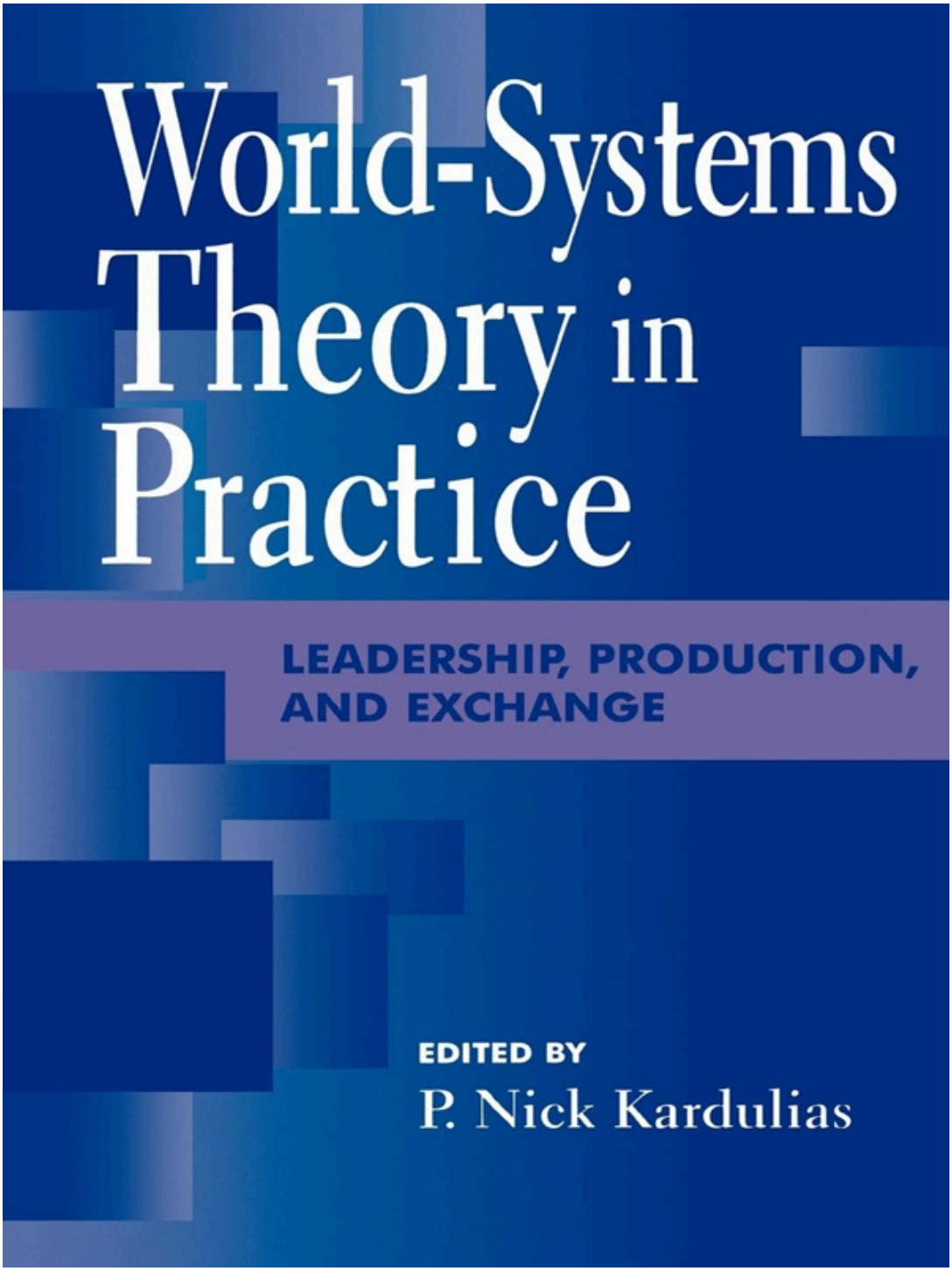
World-Systems Theory in Practice

LEADERSHIP, PRODUCTION, AND EXCHANGE

EDITED BY

P. Nick Kardulias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To the boys from Campbell, Ohio-Normando Caban, Pat Cunning, Mark Cuva, Steve Dubos, Bob Mangiarelli, Tony Romeo, and Tony Serluco—friends in the deepest and truest sense of that word.

Table of Contents

Title Page
Copyright Page
Dedication
Table of Figures
List of Tables
Foreword
Acknowledgments
Preface
1 - World-Systems and Evolution: An Appraisal
2 - Goodness of Fit: On the Relationship Between Ethnographic Data and World-Systems Theory
3 - Legitimation Crises in Prehistoric Worlds
4 - The Changing Structure of Macroregional Mesoamerica: The Classic-Postclassic Transition in the Valley of Oaxaca
5 - Negotiated Peripherality in Iron Age Greece: Accepting and Resisting the East
6 - Production Within and Beyond Imperial Boundaries: Goods, Exchange, and Power in Roman Europe
7 - The Emerging World-System and Colonial Yucatan: The Archaeology of Core-Periphery Integration, 1780-1847
8 - Thoughts on the Periphery: The Ideological Consequences of Core/Periphery Relations
9 - Rethinking World-Systems: Power, Distance, and Diasporas in the Dynamics of Interregional Interaction
10 - Multiple Levels in the Aegean Bronze Age World-System
11 - World-Systems Theory, Core-Periphery Interactions, and Elite Economic Exchange in Mississippian Societies
12 - The Inca Empire: Detailing the Complexities of Core/Periphery Interactions
13 - The Evolutionary Pulse of the World System: Hinterland Incursions and Migrations, 4000 B.C. to A.D. 1500
14 - Abuses and Uses of World Systems Theory in Archaeology

15 - Does World-Systems Theory Work?: An Ethnographer’s Perspective
16 - Conclusion
Index
About the Contributors

Table of Figures

Figure 3.1
Figure 3.2
Figure 3.3
Figure 3.4
Figure 3.5
Figure 4.1
Figure 5.1
Figure 6.1
Figure 7.1
Figure 7.2
Figure 7.3
Figure 8.1
Figure 8.2
Figure 10.1
Figure 11.1
Figure 11.2
Figure 11.3
Figure 12.1

List of Tables

Table 5.1
Table 5.2
Table 7.1
Table 7.2
Table 7.3
Table 7.4
Table 13.1
Table 13.2
Table 13.3
Table 13.4
Table 13.5
Table 13.6
Table 13.7

Foreword

The world-systems perspective is a framework for understanding and explaining long run, large-scale social change. It was originally developed to comprehend the patterns of development that emerged with European hegemony over the last six centuries. There are two key ideas: (1) societies are importantly constrained and affected by their interactions with one another, and (2) the modern world-system has been structured as a core/periphery hierarchy in which economically and militarily powerful core states have dominated and exploited less powerful peripheral regions as the Europe-centered system expanded to incorporate all the areas of the globe. These ideas have been quite helpful in understanding such phenomena as the rise and fall of hegemonic core states, long waves of economic expansion and contraction, and long-term upward trends such as economic, political and cultural integration. The current popular fascination with globalization can be grounded in historical perspective by describing the trajectories of trends of international integration that have increasingly linked all the peoples of the Earth into a single global system of trade, production, military interaction, and cultural exchange. This kind of spatio-temporal mapping is a useful antidote to the predominant view that the contemporary period is completely without historical precedent.

Most of the chapters in this book focus on the problem of utilizing the world-systems perspective to understand premodern social systems (for an introduction to the world-systems perspective see Shannon 1996). Anthropologists and archaeologists have supposed that the intersocietal framework developed to understand the contemporary system might also be useful for making sense out of earlier regional intersocietal systems. It has long been observed that core/periphery relations are not unique to the modern system. The articles herein explore the utility of world-systems concepts in several different settings and suggest conceptual modifications and research strategies that can make a more general and comparative world-systems approach more useful.

The development of world-systems ideas in anthropology began in 1977 with the publication of Jonathan Friedman's and Michael Rowlands's "Notes Toward an Epigenetic Model of the Evolution of Civilization" (Friedman and Rowlands 1977). This seminal essay reconceptualized the works of Levi-Strauss and Leach

on the dynamics of regional kinship systems, and focused on strategies of accumulation through hierarchical kinship relations that allowed elites to concentrate wealth and power. This framework was then suggestively applied to the four regions on Earth where states and cities emerged autochthonously.

In the late 1970s archaeologists such as Phil Kohl, Joseph Whitecotton, Phil Weigand, and David Wilcox also began to consider the uses of world-systems ideas in prehistory. This early work is reviewed in Hall and Chase-Dunn (1993). One of the valuable conclusions was that core/periphery relations should not be assumed, but rather the hypothesis of intersocietal hierarchy should be investigated in each case. The comparative study of world-systems allows us to study how intersocietal inequalities work in very different systems, and to explain the emergence of larger and more unequal intersocietal hierarchies over the long run. It has often been observed that peripheral regions do not simply submit to core domination. Rather core/periphery relations are a constant struggle in which the dominated and exploited fight back. Of course, this is true of the modern world-system as well.

A debate that keeps reappearing revolves around the question of cultural imperialism. Materialists tend to suppose that stable hierarchies must be based on control over necessary resources, while culturalists often argue that ideologies are themselves important sources of power. In their extreme forms both of these approaches tend to oversimplify, but the debate provides a lively forum and forces the participants to clarify their arguments.

One of the most valuable consequences of the application of world-systems ideas to earlier periods is that it has facilitated interdisciplinary communication and cooperation. The disciplinary organization of the social sciences is itself the outcome of ideological and political forces in the modern world-system. Overcoming our own conceptual blinders is one important reason to read and work across the disciplinary borders. Tom Hall and I (both sociologists) have learned to speak the languages of political science, history, geography, ethnography and archaeology. We have come to appreciate the remark of David Wilkinson that our concepts contain the bones of our intellectual ancestors. The same words are used to denote and connote rather different meanings by the adepts of different cults. This can cause great confusion and misunderstanding, but learning the dialects of other disciplines also leads to new insights about our basic concepts.

We have also noticed that learning a new discipline late in life gives one a somewhat more forgiving attitude toward the foreign ancestors. Young scholars need to overthrow their forebears in order to establish their own identities. We sociologists are still ritually slaying Talcott Parsons. But we see no need to

crucify Kroeber, Steward or Childe. And we greatly appreciate the living elders Carneiro, Sahlins, Harris while our anthropologist colleagues seem to need to cast them down. We know that our promiscuous appropriation of anthropological ideas is viewed as ignorant naivete by most anthropologists, but we ask for tolerance. Since we do not need to slay Steward, we can appreciate small-scale world-systems when we find them (e.g., Chase-Dunn and Mann 1998).

The great hope that moves us forward is a social science that will help solve the problems of the twenty-first century. The world-systems perspective may well contain the bones that can, with proper seasoning and braising, produce a broth that will help humanity survive and make good on Earth. This volume helps us work toward that end by confronting new problems, clarifying old debates, and demonstrating the scientific utility of world-systems ideas in new settings.

Chris Chase-Dunn
Mumma Ford, Maryland

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Preface

The chapters in this volume were originally presented in two venues. Approximately half of the contributions were delivered first in a session at the Annual Meeting of the Central States Anthropological Society in Indianapolis, Indiana, in March, 1995. The full complement of presentations took place at the 94th Annual Meeting of the American Anthropological Association in Washington, D.C., in November, 1995. At the invitation of Christopher Chase-Dunn, we presented initial versions of many of the chapters in a thematic section of the electronic *Journal of World Systems Research.* A number of the chapters have thus benefitted from several stages of discussion and criticism. While anthropologists (and especially archaeologists) dominated both panels, the disciplinary breadth represented by the various members contributed to an invigorating discussion which we now bring to this volume. In this attempt to reach a broad audience, however, we realize there is the problem of disciplinary specificity, i.e., the particular approaches and data with which scholars deal may not be easily comprehensible to those in other fields. For the current collection, this issue is especially acute for prehistorians, whose focus on the material record and a specialized archaeological terminology may confound some readers. The archaeologists have made efforts to minimize the use of esoteric jargon. In addition, chronological periods are clearly defined in order to fix the temporal setting. While some readers may already be very familiar with the periods in question, we thought it best to err on the side of caution.

Since its initial elaboration by Wallerstein (1974) twenty-four years ago, world-systems theory (WST), in its various guises, has proved to be a remarkably flexible construct. Not only does the approach offer a way to model the rise of modern capitalism in the West, but also to study the interaction of peripheries and cores in ancient systems. The applicability to many different geographical regions across numerous chronological periods makes WST an important tool for the comparative study of cultures. As various authors have demonstrated, with some reworking, many of Wallerstein's concepts are useful. However, several scholars point out, quite correctly, that some concepts require a complete overhaul. The value of some recent work is twofold: (1) it demonstrates the weakness of the core-periphery dichotomy in the precapitalist world; (2) it exhibits a pattern of social dynamics that characterizes state polities in non-Western settings in the

past. One key contribution that anthropology, archaeology, and history can make to the world-systems debate is to demonstrate that many historic and prehistoric states lacked the mechanisms to dominate the distant (and in some cases, even nearby) societies with which they interacted in order to procure various resources. Hall (1986), among others, pointed out the problem of depicting the effect of incorporation as unidirectional. He stressed the need to discuss culture contact as a dialogue in which both parties have at least some say in events, and attempt to implement their own agendas. This point bears repeating, especially in an archaeological context. The issue also becomes clearer in the role that elites in the periphery play: they display considerable flexibility through their ability to negotiate a better deal (what one can call negotiated peripherality, unlike the mandated conditions espoused by some dependency theorists). Historical studies that stress the role of leadership can deal effectively with this issue. The peer polity model espoused by some scholars is applicable to the conditions many city-state civilizations faced. The geographic dispersal of various resources often precluded domination of vital commodities. Even when certain resources were concentrated, the polities often lacked the ability, and perhaps the incentive, to regulate access to the material. The point is that coreperiphery exploitation needs to be demonstrated, not simply assumed. It is for precisely this reason that the interdisciplinary dialogue which occurs in this volume is vital. It is valuable for archaeologists to discuss the process of exploitation with historians and others whose more complete data permit one to trace in detail the nature of relations between core, periphery, and semiperiphery. Conversely, the archaeologist provides much greater time depth within which to test the ideas historians, sociologists, and others derive; prehistory is the laboratory for the study of long-term social change.

Another key issue that some authors raise is the multidimensionality of core-periphery distinctions. While it is true that the political and ideological components deserve greater attention, the economic dimension has not been fully explored yet. In particular, the role of production has not received as much attention as trade or exchange; some recent studies attempt to redress this oversight.

The chapters in this volume address these and other key issues. The adoption of WST by anthropologists, sociologists, and historians demonstrates the broad applicability of this approach across time and space. WST provides a common framework within which scholars from various disciplines and with interests in diverse geographical and chronological zones can engage in a dialogue about recurring patterns of interaction among various cultures. WST, with its potential for studying past and present cultural interaction, continues to yield bountiful

interdisciplinary fruit. Because that interaction can occur along political, economic, social, and religious/ritual dimensions, scholars from a variety of fields have tapped the rich potential of WST and adapted the ideas to their particular areas of interest. This process of adaptation or modification has led to many offshoots, but whether we call it WST, interregional interaction, or peer polity interaction, we are dealing with the same general phenomenon. It is this multidimensionality which allows WST to harbor such a diverse array of studies. I see WST as a powerful model which deflects the tendency in some areas, anthropology and archaeology included, to focus on differences to such a degree that we lose sight of the forest of similarities in cultural dynamics. What the perspective does, at least in part, is to provide a model for recognizing patterns which underlie social change. In this respect, one can understand WST in the context of other generalizing perspectives, such as neo-evolutionism, cultural ecology, and cultural materialism. All of these approaches buck the trend in academic circles towards narrowly focused, subjective views which emphasize the roles of individuals, the complex nuances of meaning, and post-structural interpretations. Granted, such approaches, which one can gloss under the rubric "postmodern," make valid criticisms of rigidly positivistic methods, but the resultant relativism is often equally intellectually unpalatable. To be certain, postmodern analyses have opened our eyes to the extent to which knowledge is socially constructed. The problem is that the extreme wing of the school/movement often places studies in a relativistic quagmire that denies the possibility of cross-cultural comparison. In anthropology, and to a lesser extent in sociology, the camps are severely divided over the issue of whether the respective discipline is or is not a science. One of the major problems in coming to some resolution is that polemics have dominated this debate. The resolution of this academic dilemma will come only when scholars on both sides of the divide realize that several approaches, not just one, constitute science (Bell 1994). The unvarying core, however, is an emphasis on empiricism.

WST is one approach that can lead the way in this rapprochement. First, it speaks to many different disciplines, as noted above. Second, as an outgrowth of Marxian critiques of capitalism, many scholars who employ the approach engage in structural analysis; many have moved beyond purely economic concerns to discuss the subtle connections between, e.g., ideology and political hierarchies. Third, to understand the mechanisms of incorporation, exploitation, etc., WST studies concentrate on the particular historical circumstances of the cultures under scrutiny; this emphasis provides for a rich cross-fertilization to which history, ethnohistory, cultural anthropology, archaeology, sociology, economics and other fields can contribute and from which they can benefit. Human agency is often a major focus in these studies. The point that Hall (1986) and others have made is

that we must not view incorporation as unidirectional, i.e., peoples in the periphery and semi-periphery actively engage in the economic and other interactions that define world-systems. Many of the chapters in this volume explore this very point in detail.

The chapters in this collection fall into two basic groups. The first grouping deals with theoretical issues explicitly. Hall argues that cultural evolution must be studied from a world-system perspective. In addition, he outlines a number of the adjustments to WST to make it amenable to the analysis of noncapitalist societies; in particular, the nature of exchange networks, frontier interactions, and the local impact of global processes receive consideration. Shutes picks up on the last of these and examines the efficacy of WST in making sense of ethnographic data from Ireland and Greece. He outlines the manner in which farmers in both countries negotiate the nature of their involvement in the larger economic forces at play on the international scene. Peregrine tackles a different problem, the lack of work by WST theorists on the patterns of social collapse. Borrowing from Habermas, he poses the issue of world-system fragmentation as a matter of crisis in sociopolitical legitimation rather than strictly economic conditions. He uses Tonga and Moundville as respective ethnographic and archaeological examples of this process.

The second group of chapters deals more directly with the application, and in some cases the criticism, of WST to specific data sets. The chapters also fall into two geographic subcategories. The first is the New World, with Mesoamerica, the Andean region, and the North American Midwest represented, and the second is Europe. Feinman identifies two organizational modes, corporate-based and network-based, which demonstrate variable strategies in regional integration. A multiscalar approach, he argues, is the most appropriate to study the differential nature of the Classic-Postclassic transition in the southern highlands of Oaxaca, Mexico. Alexander uses archaeological, historic, and ethnohistoric data from Yaxcabá region of the Yucatán peninsula to explore the nature of local incorporation into the capitalist world-system. She finds architecture, the distribution of exotic products, and site structure to be good indicators of production organization in eighteenth- and nineteenth-century Yaxcabá. Of particular interest is her emphasis on house lots, because the study of such features tells us how individual families adapted to problems and opportunities raised by incorporation. Alexander frames the tension between cattle-raising on haciendas and subsistence farming on pueblo lands in terms of resistance to integration by the farmers. Schortman and Urban confront issues associated with leadership and power in an area (Honduras) many consider peripheral to the Mesoamerican Mayan core. They explore the mechanisms by which elites gain

access to, and eventually control over, the labor of others. They argue that this appropriation of mass labor occurs through a variety of mechanisms, not the least of which are ideological elements. The avenues to power require constant vigilance and involve both local and regional forces. They then demonstrate how this model applies to conditions in the Naco Valley in northwest Honduras. Kuznar examines Inca imperial policy in terms of core-periphery relations. The type of interaction varied depending on a number of traits (population size, political authority, kind and quantity of natural resources, and proximity to the capital at Cuzco) of the conquered people, and the Inca needs for manpower and basic materials. He argues that the Inca Empire was incompletely integrated at the time of the Spanish conquest, but it had encountered problems as it expanded; the possibility of incorporating new polities became attenuated the further these were from the Cuzco core. Jeske subjects the Mississippian culture of the late prehistoric Midwest, commonly credited as being the most complex prehistoric society north of Mexico, to a world-systems treatment. He finds WST lacking in ability to explain the presence of ceremonial and ritual objects at various Mississippian and related sites in the Midwest. In brief, Jeske suggests WST fails to deal adequately with the noncapitalist nature of Mississippian culture.

The chapters with a European focus cover a number of time periods. Kardulias suggests that with some minor adjustments, WST is well-suited to the analysis of the Bronze Age interaction in the Aegean area. He argues for the presence of three interrelated levels for the Aegean world-system. While the three levels were nested one in the other, each did have some operations distinct to itself. The insular nature of Aegean trade networks facilitated the integration of activities, but the Bronze Age palaces, while important for the international trade, did not control all aspects of exchange in the second millennium B.C., i.e., cores did not completely dominate peripheries. Morris also takes the Aegean as his area of interest, but he focuses on the Iron Age of the first millennium B.C. when complex society reemerges in Greece after the Dark Age hiatus. In this period, Greece is in the role of periphery to the dominant Near Eastern world-system. While oriental influence is clear during this period, Morris argues that the Greeks negotiated the character of their peripheral status, i.e., they selectively adopted eastern elements to meet their o wn particular social, political, and economic needs. In his discussion of the Romans in central Europe, Wells emphasizes a similar critical role for the residents of the periphery, in this case the people on or near the frontier of the Roman Empire. His careful examination of archaeological evidence from a number of excavations reveals the production at a number of sites of many materials vital to the operation of Roman forts along the frontier. The economic system was in fact quite decentralized. In addition, a number of imports came into Roman territory from Germany, Scandinavia, and eastern

Europe, areas completely beyond imperial control. Modelski and Thompson deal with much broader geographical and temporal dimensions in their paper. They examine the nature of migrations or incursions from hinterland areas into urbanized zones in the period between 4000 B.C. and A.D. 1500 in an attempt to discern patterns of long-term societal evolution. The dislocation of populations, and attendant social, political, and economic results are, they argue, part of large cycles which characterize world-systems. What this and many of the other chapters offer is specific information and conceptual reevaluation in the effort to gain a better understanding of the complex processes of interregional and intersocietal interaction. Some emerge from this effort with a deeper appreciation and use for WST, while others find the perspective lacking in serious ways. The interlocutors in this exchange all gained from the effort to utilize or evaluate WST, despite the lack of complete agreement.

While WST has proved to be a vital area for academic discourse, it is not universally accepted as the best paradigm for various disciplines to adopt. In the search for a panacea, some scholars extol the virtues of one approach over all others. Anthropologists in particular are aware of the pitfalls of such thinking; in the nineteenth century, evolutionism dominated academic debate, only to be shorn of its preeminent status when certain people correctly questioned some of its assumptions and weak empirical database. Several of the authors in this volume argue that WST provides at best a modest explanation for certain past events. It is, in fact, still legitimate to ask whether WST should be applied to precapitalist settings. The doubters among us provide important cautionary statements; we would do well to listen carefully to their admonitions. The inclusion of a broad range of opinions about the efficacy of WST does, in this way, serve its intended purpose as we move toward that elusive but vital middle ground.

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1

World-Systems and Evolution: An Appraisal

Thomas D. Hall

Introduction

I begin by indicating several problems, then review recent developments in world-systems work, and end with some ways to promote more fruitful interaction. First, I still find instances of writers who proclaim the uselessness of world-systems theory, but who have not examined recent world-systems work (Hall 1995a, 1995b, 1997a, 1997b, 1998; Hall and Chase-Dunn 1993, 1994). For those of us engaged in extending world-systems analysis to precapitalist settings (i.e., before approximately A.D. 1500; "pre" is meant to convey chronology, not inevitability) the worst and most frustrating situation is when outsiders assume that by citing *Modern World-System I* (Wallerstein 1974b) they both know and have acknowledged the whole of world-systems work.

Sometimes these omissions are due to the ways in which researchers do *not* communicate—whether because of time constraints, journal reading habits, or not having seen parallel work in related disciplines. For example, Brian Ferguson and Neil Whitehead in their introduction (1992a:4) to *War in the Tribal Zone* (1992b), lament that world-systems theory *should have addressed* how state expansion engenders intertribal warfare. In a review I pointed out that some of us had, in fact, addressed that topic (Hall 1993). This case has a felicitous ending: we had simply not seen each other's work. Since then we have had a fairly regular exchange.

Such omissions, of course, have not been a monopoly of anthropologists and archaeologists, but have occurred in the other social sciences, and among historians and civilizationists (Sanderson 1995a, 1995b; Sanderson and Hall 1995a, 1995b).

From a different angle, many writers are talking about globalization (Featherstone 1990; Featherstone et al. 1995; Robertson 1990, 1992; Roudometof and Robertson 1995) and "glocalization": the manifestation of local tendencies in global processes (Robertson 1995). Many of those discussing "globalization"

emphasize culture and communication, sometimes reinventing Marshall McLuhan's "Global Village" (1964; McLuhan and Agel 1968) or Buckminster Fuller's work (e.g., Fuller et al. 1970)—often without due credit or citation. Few of them mention Immanuel Wallerstein who has been discussing global processes for over twenty years, while some engage him directly (Wallerstein 1990a, 1990b, 1991a, 1991b). In other ways it is typical academic invention of a new fad to address the latest perturbation in long-term trends, ignoring all that has gone before.

Finally, there are those who are carrying postmodernism and deconstructionism to extremes, declaring all theorizing, especially evolutionary theorizing, suspect. Ironically, there is a rather simple world-system explanation for these movements. Albert Bergesen argues (1995a, 1995b) that in periods of hegemonic decline, such as the current one, dominant paradigms for organizing information break down. This gives rise to a proliferation of viewpoints and modes of analysis, with no criteria to discriminate amongst them. This can then lead to the current state in literary studies where anything goes and all truth is relative—at least that is what my colleagues in literature tell me. This appears to be much like what Thomas Kuhn (1970) describes as the transition from one paradigm to another. In this case Bergesen is connecting this shift to the hegemonic cycles in the world-system.

This is not to say that some of the criticisms, especially those directed at exposing ethnocentric, or core-centric, biases in theorizing, choice of research topics, and modes of analysis are without merit. But once all standards other than "texts" produced by authors not from the (declining) hegemonic state are abandoned, conversation and dialogue become impossible. But that, as we say, is another story—and one that Bergesen tells better than I do.

So what can remedy all this? Obviously, it is important to examine the recent work in world-systems theorizing, especially as used in precapitalist settings. The next step is to engage in that work directly—what many of the other chapters in this collection do in a variety of ways. To facilitate that process, and by way of general introduction to the following chapters I give an overview of recent world-systems work, indicating gaps in need of further development.

New Directions in World-Systems Research

There is so much new work that Wallerstein's writings, including *Modern World-System, I, II, III* (1974b, 1980, 1989) barely sample world-systems research. Christopher Chase-Dunn's *Global Formation* (1989) summarizes most of the quantitative studies of the modern world-system through its publication in 1989. Giovanni Arrighi's recent *The Long Twentieth Century* (1994) explores the oscillations between production capital and finance capital within the modern

world-system. In addition, William Martin (1994) and Christopher Chase-Dunn with Peter Grimes (1995) summarize more recent world-systems work.

Indeed, there are so many variations in world-systems analysis, that it is no longer appropriate to refer to it as a theory. It is better called a perspective, or in Kuhn's sense (1970), a paradigm which contains many competing theories. In Kuhn's use, a paradigm is logically more general than a theory. It is a set of guiding assumptions and approaches that direct researchers to ask questions, and develop theories (note the plural) that attempt to answer those questions.

In political science and international relations George Modelski, William Thompson, and Karen Rasler have developed a number of world-systems theories (Modelski 1987; Modelski and Thompson 1988, 1996; Rasler and Thompson 1989, 1994; Thompson 1983, 1988). These writers emphasize geopolitics and technological innovations as keys to understanding international relations and wars. They focus on war, particularly naval power, and international relations more than other world-systems analysts. They all study how cycles of global war emanate from world-systemic processes. George Modelski has deeper interests in long-term evolution than does Immanuel Wallerstein (1995a, 1995b, 1995c). Recently Modelski and Thompson (1996) have joined in tracing the roots of the modern world-system back at least a millennium.

A major mistake—one that typically vitiates many criticisms of world-systems "theory"—is to assume that to have read one or two of Wallerstein's works (1974a, 1974b), is to "understand" the world-systems perspective. The world-systems perspective can no longer be associated solely with his work.

Researchers working from different theoretical bases within the world-systems perspective have addressed many new subjects. Geographers have done a great deal of work on spatial aspects of world-systems relations and dynamics (see review by Flint and Shelley 1996). Some of the new topics are: cyclical processes in the world-system (Suter 1992); the roles of women, households, and gender in the world-economy (Bradley 1996; Friedman-Kasaba 1996; Smith et al. 1988; Tiano 1994; Ward 1984, 1990, 1993); the consequences of the collapse of the Soviet Union (Bergesen 1992a; Chase-Dunn 1992; Smith and Böröcz 1995); cities in the world-system (Kasaba 1991; Timberlake 1985); the role of culture in the world-economy (Bergesen 1990, 1991, 1992b, 1996; Kiser and Drass 1987); the environment (Bergesen 1995a, 1995b; Chew 1992, 1995a, 1995b); and subsistence (Bradley et al. 1990). Many case studies offer fine-grained analyses of the complex functioning of the world-system with respect to: slavery (Morrissey 1989; Tomich 1990), agrarian capitalism (McMichael 1984; So 1986), peasants (Bunker 1987; Troillot 1988), revolutions (Foran 1993), recent changes in east Asia (So and Chiu 1995, 1996); and relations with nonstate or aboriginal

peoples in the world-economy (Baugh 1991; Dunaway 1994, 1996a, 1996b; Hall 1983, 1986, 1987, 1988, 1989, 1991a, 1991b; Harris 1990; Kardulias 1990; Mathien and McGuire 1986; Meyer 1990, 1991, 1994; Peregrine 1992, 1995).

Eric Wolf (1990:594) has suggested that world-systems theory is one way of cumulating anthropological knowledge and building explanations for cultural phenomena (see also Blanton et al. 1997). In the introduction to my section of the latter book (Hall 1997a) I argue that much of the work in anthropology that does take cognizance of external connections is world-systemic, but often does not explicitly employ a world-systems perspective.

Archaeologists, in particular, have found considerable potential in world-systems theory, but have been dissatisfied with the results (Hall and Chase-Dunn 1993). All have recognized, to some degree, that world-systems theory cannot be applied wholesale to precapitalist settings. Pailes and Whitecotton (1975, 1979) were the first to modify world-systems theory for use in precapitalist settings. Jane Schneider (1977) wrote one of the most insightful critiques of early world-systems theory, questioning Wallerstein's emphasis on bulk to the neglect of luxury goods. Blanton and Feinman (1984) and Santley and Alexander (1992) have also made important critical statements.

Much of this work is directed not only at understanding precapitalist intersocietal interactions but also at improved understanding of social evolution. The value of a world-systems perspective on social evolution bears closer discussion.

The World-Systems Perspective and Evolution

In chapter 10 of *Social Evolutionism* (1990), Stephen Sanderson argued that world-systems theory ought to be evolutionary, even though it often is not. He elaborates this argument in *Social Transformations* (1995c), using some of the recent extensions of world-systems analysis to precapitalist settings. Since he has reviewed both the debates on evolutionism and their critiques in detail I do not review that discussion here. Rather, I turn to the first topic: that the study of evolution must include examination of the role, and the development of, intergroup relations.

Put concisely, the strong version of the argument is that interregional interactions have always played a crucial role in evolution. We can *not* explain how humans got from a situation some ten thousand years ago of an order of magnitude of one hundred thousand "groups" (or what anthropologists conventionally call "bands") of around one hundred members to our current

situation of around two hundred states of one hundred or more millions of members without examining carefully the roles of interregional interaction.

Let me qualify this statement in a few ways. First, the above statement is one of orders of magnitude, so one hundred thousand societies (for those not familiar with "order of magnitude" as used in the physical sciences) means somewhere between thirty and three hundred thousand.

Second, I argue that most interregional interaction networks constitute one form or another of a "world-system," or better, core/periphery relations. They are "worlds" in the sense that they are far more self-contained than anything that exists outside of them.

Third, I use "group" rather than society because of the difficulty in bounding what we mean and to avoid implying too much about presumed social structures. We must recognize, a la Wolf's (1982) comments, that groups, or "societies" are not billiard balls with firm boundaries, but fuzzy units with variable and permeable boundaries. Sharply delineated boundaries are a relatively modern phenomenon. Even today, they are frequently disputed, often with great violence. Still, we can identify, at least approximately, groups by means of a combination of external and internal identity criteria.

Even while not achieving full agreement on what constitutes a group and consequently on the exact number of groups, it is clear that over the last ten millennia or so the number of groups has decreased radically and their size has increased even more radically. Without a doubt, their "natures," that is social structures, boundary criteria, permeability and so on, have changed, again often dramatically, during this time.

My claim can now be restated: a fundamental unit of social evolution is the world-system or core/periphery system. The claim is dialectic. The system itself evolves, and as it evolves it transforms its constituent members. Conversely, changes in constituent members collectively produce change in the overall system. To focus solely on the constituent members (conventional "societies") is to miss a good deal of the action, and to fundamentally misunderstand social evolution. The converse is equally valid.

Indeed, if there is a "system" to the world-system, even if it is a "ramshackle affair" (Stinchcombe 1982), its processes and dynamics should be manifested, in some form, *everywhere* in the system, even on its far peripheries. Robert Pirsig made the same point when commenting on his traveling companions' reticence to become involved in the technology of motorcycle maintenance:

> The Buddha, the Godhead, resides quite as comfortably in the circuits of a digital computer or the gears of a cycle transmission as he does at the top of a mountain or in the petals of a flower (Pirsig 1974:26).

Likewise, what happens on those far peripheries is part of the system, plays an important role in its overall dynamics and evolution, and is a vital part of its story.

The effects of the periphery on the core and on the entire system have, however, received less attention than the reverse. There are several reasons for this. First, there is a clear asymmetry in core/periphery relations. The core is generally more powerful than the periphery—certainly for the modern world-system. Second, we must distinguish between the core and the periphery as wholes, and distinct core areas and specific peripheral areas. When we study specifics, say Netherlands versus the Sultanate of Brunei, or Spain versus New Mexico in the seventeenth century, the asymmetry is even more pronounced. Yet the periphery as a whole can be much more significant. This issue is at the heart of debates over the necessity of peripheral exploitation for core development (Bairoch 1986; O'Brien 1982; Stern 1988a, 1988b; Wallerstein 1988). Third is a tendency for detailed studies of various peripheral areas to be read by regional specialists more than by those interested in general world-systems theory.

We also need attention to the effects of the periphery, as a collective whole and as individual areas, on the core, again as a collective whole and individual core powers. Sidney Mintz (1985), while not using an explicit world-systems perspective, indeed being critical of it (1977), makes a persuasive argument that techniques of control, specifically on sugar plantations, served as a model for labor control in the first factories. Whether his claim is entirely correct is not the point here. Rather, it is the attempt to examine how some core transformations were shaped by the periphery.

Criticisms of world-systems theory for being too abstract and for ignoring proactive efforts of inhabitants of peripheral regions are occasionally on target. Typically, however, they are wide of the mark (see Hall 1997a). Much of the best recent work in world-systems addresses precisely this issue. Still, we need to take Robert Pirsig's lesson to heart and study how the world-system manifests itself in local conditions. We need to attend to how system-wide processes and dynamics shape local processes and dynamics in transforming, sometimes transmuting, local class, racial/ethnic, and gender relations. We need to devote special attention to how local actors attempt, and sometimes succeed, in resisting, or at least turning to their own advantage, various global forces (Alexander, Feinman,

Peregrine, Kardulias, Kuznar, Morris, Shutes, and Wells in this collection all do this to various degrees).

I will not support the claim for the fundamental importance of world-systems in evolutionary processes in detail in this paper, but will return to it in the conclusion. I hope with sufficient evidence and argument to entice others to examine the claim further (see Schortman and Urban 1994a, 1994b; Dunaway 1996a, 1996b; and as Kardulias and Shutes in this collection have done so as well). To do so, however, requires further discussion of recent developments in precapitalist world-systems theorizing.

Taking the Modern World-System into the Past

Why attempt to extend a theory avowedly developed to deal with the modern era, i.e., from about A.D. 1500, into the ancient past? Two pressures intersect here. First is the frustration of archaeologists with existing theories of interregional relations (Schortman and Urban 1992a, 1992b). As I noted above, many archaeologists have tried to use world-systems theory to understand intersocietal relations that bear at least a "family resemblance" to world-systems relations. The second source is with sociologists who have been trying to sort out whether or not the modern world-system is undergoing significant change, or merely going through one of its typical, if dramatic, cyclical changes.

Here it is useful to draw a distinction between changes of roles and positions within the system and changes in the system itself, or put better, in system logic. The modern world-system has gone through several rounds of hegemonic shifts and several cycles from unicentric to multicentric organization (or hegemonic shifts, see Chase-Dunn 1989). The shift from British to American hegemony early in the twentieth century was, to be sure, dramatic and important. But from the point of view of the capitalist world-system it was a routine change. A much deeper change was the first appearance of the capitalist world-system itself.

Are we experiencing such a major shift now, or is the relative decline of the United States merely a sign of an approaching change in hegemons? The difference between the two is hard to discern from the midst of a "noisy" transition. Beyond this, if a system change is afoot, how much flexibility will there be in the process and how much can it be shaped by purposeful human efforts? Certainly these are important questions.

One way to approach them is to examine past major changes. *Not* on the assumption that such transitions are identical, but on the more modest assumption that studying past system changes might lend some insight into possible future changes. Work in this area is in its infancy, so conclusions are tentative.

Wallerstein himself does not think this is an entirely promising enterprise (Wallerstein 1993, 1995a, 1995b, 1995c). While many civilizationists question the utility of the world-systems perspective in addressing such issues, they applaud the attention to ancient empires (Sanderson 1995a, 1995b; Melko 1994, 1995).

A great deal has already been written on this topic. In addition to materials cited above, (Hall and Chase-Dunn 1993, 1994) many others are available or on the way (Blanton et al. 1997; Chase-Dunn and Hall 1994, 1995, 1997; Frank and Gills 1993; Modelski and Thompson 1996; Peregrine and Feinman 1996; Sanderson 1995a; Schortman and Urban 1994a, 1994b). While these and other works contain a great deal of controversy, they all share an approach which greatly modifies world-systems theory as first presented by Wallerstein (1974a, 1974b).

Janet Abu-Lughod (1989) argued for twelfth-, thirteenth-, and fourteenth-century roots for the modern world-system, deeper than Wallerstein's long sixteenth century. She also argued that the entire conception of the "rise of the west" is mistaken, and suggests that the "east fell," or at least withdrew (Abu-Lughod 1989, 1993; Fitzpatrick 1992).

Christopher Chase-Dunn and I (1991, 1993, 1994, 1995, 1997) have argued that in order to be useful in precapitalist settings many of the assumptions of the theory of the modern world-system must be transformed into empirical questions. Andre Gunder Frank and Barry K. Gills (1992, 1993) have made similar arguments about "the 5000 year world system." Schortman and Urban (1994a, 1994b) have developed important critical insights in core/periphery relations in their study of southeast Mesoamerica.

Chase-Dunn and I also have been trying to extend world-systems theory into the distant past, twice as far as Andre Gunder Frank's and Barry Gills's 5,000-year-old system (1993), back some 10,000 years to the so-called Neolithic revolution. To do so we have had to transform nearly every world-system assumption into an empirical, historical problem, and stretch some concepts considerably.

We argue that world-systems have four kinds of boundaries, which rarely coincide. Interestingly, the twentieth-century world-system is one of those rare exceptions. These are: (1) a boundary of information or cultural flows; (2) a boundary of luxury or prestige goods flows; (3) a boundary of political/military interaction; and (4) a boundary of bulk goods flows. Typically, but not always, these networks are nested. Relative sizes of the nets, the density of nesting, and so forth remain somewhat problematic. Information sometimes does *not* flow with

luxury goods, when trade is "down-the-line," that is when goods go from A to B to C, etc. In such cases information may become garbled, even as the goods move. Anyone who has followed the distortions introduced into a "message" whispered from person to person as it moves around a room is familiar with how such garbling can occur.

We retain two key concepts from the theory of the modern world-system. First, the system itself is the fundamental unit of analysis. All parts of the system and their changes can only be understood in relation to the system as a whole. Thus, "societies" are not fundamental units of social organization, but are crystallizations of systemic relations. As noted above, the converse also holds, namely, that the system is constructed by processes and changes in its constituent components. Second, any such system is a "world" in the sense that it is a self-contained division of labor and that there is a sharp break in the relative levels of interactions within the system from those with the outside. More specifically, we hold an interaction to be "important" if it somehow facilitates continued maintenance of the system. Thus, while boundaries *are* blurry, they are no less real.

Using these criteria we identify three past forms of world-systems: (1) kin-ordered, normatively-based, world-systems; (2) tributary, politically coercive, state-based world-systems, many of which were world-empires; and (3) capitalist, economically coercive, state-based world-systems. We also posit a potential fourth world-system, a "socialist" world-system, that is, one in which resources are used to promote collective, egalitarian welfare based on democratic participation. The collapse of the Soviet Union in no way vitiates this possibility. In world-systems views there has never been a socialist system, or even a socialist state. Rather, we have had state-owned capitalist states (see Chase-Dunn [1982, 1992] for more detailed discussion of this topic).

The second type of world-system grew out of the sedentary world-systems that formed some 10,000 years ago during the Neolithic revolution. In this view, states are a 5,000-year-old invention which subverted the rule of kinship—although not entirely—and replaced it with coercive political power. The invention of states, and of state-based world-systems, allowed much greater accumulation of capital than heretofore had been possible. There were a large variety of tributary states, but all rested on coerced accumulation of capital from direct producers.

This is where Frank and Gills begin their analysis, which Chase-Dunn and I argue is too late. In doing so they assume one of the most difficult changes to explain in human history-the origins of states (note plural). This allows them to avoid explaining how and why states were invented. We explain this transition with Robert Carneiro's circumscription theory (1970) combined with population

pressure of sufficient severity to compel humans via Ester Boserup's (1965, 1981) principle of least effort to try to do things differently. We note that this comes significantly before the carrying capacity of any technology in a specific environment is reached.

As an interesting aside, anthropologists Irene Silverblatt (1987, 1988) and Christine Gailey (1985, 1987) have observed that the replacement of kinship with politics as the dominant mode of social organization entailed a denigration of status and roles of women in society. This explains both the universal lower status of women in state-based societies, and the tremendous variation in the ways in which gender stratification is expressed. Any given gender stratification is a function of both the particular kinship system that preceded it and the specifics of the development of the state.

Throughout the era of tributary systems—approximately 5,000 to about 500 years ago—the amount of capital accumulated through trade increased steadily, if sporadically. In recognizing this we are not capitulating to the formalist camp in debates about economic history. Rather, we acknowledge that the amount of wealth involved in commerce was increasing. This explains why in various places and times historians and archaeologists have found evidence of what appeared as "capitalism" in the ancient world: it was there. The key, however, is that it was always embedded in a larger tributary logic. In this sense Karl Polanyi's (1944, 1957, 1977) argument for a substantive meaning of "economic" was fundamentally correct.

Then, sometime in the seventeenth century, the merchant bourgeoisie in the Netherlands succeeded not only in gaining control of a state, but also in becoming the core of a newly emerging world-system. This new, capitalist world-system, was driven by the accumulation of capital, that is capital accrued through control of production of commodities. In this system, we find a sharp reversal of the logic of the system. Now instead of a leading power, a hegemon, trying to conquer all rivals, the hegemon eschews empire, opting instead for free trade, or more precisely sufficiently free trade that its capitalist classes can continue to profit against rival capitalist classes. What do we learn from all this? At this preliminary stage, unfortunately, not as much as we would like, but enough to suggest that further research and theorizing in this area should be fruitful.

Preliminary Findings: Cycles and Hierarchies

One of the preliminary results of investigating precapitalist core/periphery relations (Chase-Dunn and Hall 1997) is that all world-systems seem to pulse. By pulsation we mean they seem to go through cycles of expansion and contraction, or faster and slower expansion. Interestingly, this is true for all three types of

systems. Furthermore, in those systems which have hierarchical relations among the constituent members (that is, all but the most basic sedentary forager systems) there are cycles of centralization. These may be cycles of rise and demise of hegemonic states or cycles of unipolar empires with multipolar interstate systems. Just exactly what drives these somewhat autonomous cycles is not yet clear.

By examining such a wide variety of core/periphery relations we can also ask when do such systems become hierarchical? That is, when does the core regularly and systematically exploit the periphery? Our investigations, again preliminary, suggest that for a world-system to be hierarchical it must be composed of groups that exhibit different levels of complexity *and* all those groups must have considerable internal inequality. Thus, the appearance of inequality is a property of both component groups in a world-system and of the world-system as a whole.

One of the more interesting, if tentative, findings of comparative analysis of world-systems is that balance of power situations occur only under specific conditions. Furthermore, the modern, capitalist world-system seems to be unique in that it is the first world-system in which one core power, or more typically a rising semiperipheral marcher state, does not attempt to conquer the entire system. I use "seems to" advisedly since the modern world-system may not yet be the longest lived interstates balance of power system, although it is assuredly among the longer-lived.

Within these various changes and continuities are others: a sporadic, but steady increase in global inequality, a similar increase in size of overall systems and of component units (states), an increasing density of trade, especially in bulk or low value to weight goods, and continued warfare.

Indeed, the cycles of warfare are some of the most difficult to explain (Chase-Dunn 1990; Goldstein 1988; Schaeffer 1989). If past cycles continue as they have for the modern world-system, we can expect a general core war sometime in the first decades of the twenty-first century (Chase-Dunn and O'Reilly 1989). Seldom have social scientists derived a result they want so much *not* to be true.

Finally, comparative world-systems analysis, along with world historian William H. McNeill (1986), indicates strongly that the so-called nation-state (a government over a group with shared identity) may be a very temporary historical aberration. Multiethnic states are the historical norm. Thus, those who worry about "foreign contamination" rail against history. Preoccupation with "nation-building" is a waste of time. The recent rise of "multiculturalism" is not so much a fad, as a return to normalcy.

One source of multicultural composition of states, and especially world-systems, is their general tendency to pulsate and expand, and thus incorporate

new areas and new peoples.

World-System Expansion, Incorporation, and Frontiers

Discussion of absorption of peoples and regions into the world-system, what I and others have called "incorporation" (Hall 1986, 1987, 1989; Hopkins et al. 1987; So 1984; Wallerstein and Martin 1979), focuses attention on local actors. World-systems analyses have been criticized—with some, but not complete justification—for a tendency to overemphasize analysis of core regions, neglect peripheral regions, and to see peripheral peoples as "victims" instead of actors. I argue incorporation is most easily observed in peripheral areas and that peripheral areas are the best location to study the efforts of local actors to resist incorporation (see Morris, this volume).

I have expanded Wallerstein's fundamentally dichotomous conceptualization (in or out of the system) to an extended continuum that emphasizes the degree of incorporation of a region or people. I argued that Wallerstein discusses only the very strong pole of the continuum. I studied how changes in *the degree of* incorporation both affect those incorporated, and conversely how their actions shaped not only the incorporation process, but the degree of incorporation. Theorizing of incorporation is far from complete (see Hall 1987). To do it will require more detailed local studies which attend to peripheral actors and their attempts to control, shape, and resist the encroaching world-system.

Others, some of whom have used my expanded concept of incorporation, have begun to do that work in other North American settings (Harris 1990; Kardulias 1990). Melissa Meyer has studied the role of incorporation in changes in the political culture among nineteenth- and twentieth-century Anishinaabeg (Chippewa/Ojibway) (Meyer 1990, 1991, 1994). Wilma Dunaway has made analogous studies of commodity chains in the fur trade in what became the southeastern U.S. (Dunaway 1994, 1996a, 1996b).

One spatial theme that addresses peripheral relations directly is the formation and transformation of frontiers. Clearly, when a world-system expands, new areas are incorporated, and boundaries are formed and transformed (Wallerstein 1974b). I addressed this implicitly in my work on the Southwest (1989, 1998; Markoff 1994).

The same issues arise in the work of Andrew Sherratt (1993) on Bronze Age Europe. He argues that there is a *margin* beyond the periphery of the Near Eastern and Mediterranean agricultural and urbanizing world-system in Bronze Age Europe. He says, "The characteristic of the margin is that it is dominated by time-lag phenomena—escapes—rather than structural interdependence with the core"

(Sherratt 1993:43). The latter term, "structural interdependence," is reserved for the periphery.

Sherratt drew his concept of *margin* from Schneider's critique of Wallerstein's emphasis on bulk goods: "Marginality is a distinct concept from periphery. In contrast to peripheral areas, marginal ones are disengaged from processes of struggle and competition, differentiation, and specialization in relation to much older and more developed centers of civilization" (Schneider 1977:21).

His concept of "margin" is similar to my concepts of contact periphery and marginal periphery which are areas only partially incorporated into the world-system. Such areas often experienced profound effects from incorporation, and occasionally devastating ones, despite its relatively limited degree.

Still, marginal peripheries typically have experienced milder transformations, and hence often preserve older, untransformed or only partially transformed forms of social organization. This, it seems, is quite close to Sherratt's idea that margins operate at a time-lag and often "escape" core changes.

If we accept that world-systems have as many as four levels of boundary (information, prestige/luxury goods, political/military, and bulk goods) and that incorporation into a world-system is a matter of degree, then we have a means to begin explaining the formation and transformation of various kinds of transitional zones of incorporation, or types of frontiers. Furthermore, we have a way of sorting out how one type transforms into another as it becomes more tightly incorporated into a world-system. Thus, patterns that we see on a map are actually freeze-frame snapshots of complex processes of incorporation (e. g., see Sherratt 1993:32, Figure 9).

Another aspect of incorporation is its reversibility. What happens when a core collapses or when connections to the core are cut? If the core is extracting some local resource, the loosening or cutting of the connection may allow a return of local prosperity. The taking of slaves, "captives," throughout much of the time of Spanish domination of the Southwest no doubt undermined the prosperity of those groups who were raided. So that when incorporation decreased and such raiding decreased, some prosperity returned to those who had been raided.

If, on the other hand, the core supplied some resource for which there was no local substitute, any prosperity that was a consequence of access to that resource would collapse with its loss. This, some writers have argued (see essays in Mathien and McGuire 1986), is behind the collapse of the Chacoan system in the thirteenth century of what became northwestern New Mexico. The loss of trade connections to Mesoamerica undermined the entire Chacoan economy.

Prestige goods are especially prone to this type of effect (e.g., Peregrine 1992, 1995, 1996, and this collection). If some rare good is used by a local elite to shore up its position, then loss of access would undermine its position, unless they could find a substitute good which they could also monopolize. If, however, the good could be produced locally, then the changes to which it gave rise need not reverse. Turquoise is a familiar Southwestern prestige good.

Thus, loosening of incorporation can produce radically different results, depending on the precise nature of the connection and local circumstances. The volatility of change is, if anything, greater in loosely incorporated areas (what Sherratt calls margins), than in more tightly incorporated areas. That Sherratt found such similar patterns in a vastly different setting strongly suggests the analysis of incorporation has wide utility.

Incorporation also can have profound effects on individuals and groups. Some of the American Indian "tribes" we have come to know in the U.S. Southwest were, in fact, created from an aboriginal base in the process of incorporation into first the Spanish empire, subsequently the Mexican state, and then the United States.

The Dine (Navajo) are a prime example. While language, customs, and some vague sense of being the same "people" predate the arrival of Europeans, a strong Diné-wide identity was only created in the course of interaction with succeeding European invaders. A formal tribal government was a twentieth-century Navajo invention, which was developed, I would add, precisely to deal with incorporation into American society and the capitalist world-system.

Following the work of Melissa Meyer, incorporation can also have divisive effects. For the White Earth Anishinaabeg (Chippewa or Ojibwa), increasing incorporation broke down old clan and band distinctions and created a division between more and less assimilated Anishinaabeg, or in local parlance, full- and mixed-bloods. Indeed, throughout "Indian country" the full-blood/mixed-blood distinction is a product of incorporation into European societies.

At times incorporation promotes assimilation to the dominant culture. However, at other times, when groups are pushed into very different roles in production or trade group, differences can be heightened, promoting ethnic differentiation. Sherratt makes a similar argument (1993:18, note 13). The often cited conflicts between the League of the Iroquois and neighboring peoples are a North American example.

Thus, the fluctuations inherent in world-systems-pulsation, rise and fall of hegemons, oscillation between centralized and decentralized forms—generate many types of social change, some of which eventually may destabilize the

overall system. These mechanisms yield further insight into the processes of social evolution.

World-Systems and Evolution

I will close by returning to the claim raised in the beginning of this paper: that the world-system or core-periphery system is a fundamental unit of social evolution. A full explication of this claim takes the better part of a book (Chase-Dunn and Hall 1997). A thumbnail sketch must suffice here. We begin with an iteration model that involves complex feedback loops among population pressure, social organization, including especially the ways in which people make their livings (mode of production), environmental degradation, intergroup conflict, and degree of boundedness or circumscription (Carneiro 1970). These are all familiar models and explanations. We call this the iteration model.

Many writers (e.g., Harris 1977, 1979; Johnson and Earle 1987) have used one or another variation of these processes to explain the Neolithic revolution and origin of states. The growth of state-systems into empires and the origin of capitalism have been less satisfactorily accounted for by such explanations. Sanderson (1995c) summarizes these explanations and argues that other types of explanation are needed for these changes, ones that include increasing commercialization and some world-systemic processes.

We note that increasing trade and commercialization propagated pathogens along trade routes which connected informational and prestige goods networks. William McNeill (1976) traces how these pathogens unleashed the Black Death in Europe and similar outbreaks in China. Such “virgin soil epidemics” (Crosby 1972, 1986) have occurred many times in human history, typically when formerly isolated groups first came into contact. As is well known, they can be extremely disruptive (see, for example, Reff 1991; Thornton 1987).

I must also say a few words about the special role of semiperipheral states in system transformation. A semiperipheral state, especially one which can take advantage of favorable geopolitical position, often will play a vital role in system change. Semiperipheral states often have the “advantages of backwardness” (Gerschenkron 1966): they have access to latest technologies, including what Michael Mann (1986) calls “techniques of power,” but have not yet become burdened with the costs of empire, or in Tainter’s (1988) terms, have not reached a point of declining marginal returns. If, additionally, a semiperipheral state is located on the edge of a system so that it is not vulnerable to attack from two directions, it can eliminate core competitors one at a time and come to dominate the system. This, incidentally, is one of the reasons behind Elman Service’s

observation (1975) that early civilizations did not fall, but were pushed. Thus, semiperipheral states often play a crucial role in system change.

Our explanation is that pulsating expansion of world-systems (both tributary and capitalist, although for different reasons, and through different dynamics) changes the dynamics of the iteration process. Expansion of world-systems temporarily enhances the direct effects of population density on hierarchy formation and technological intensification through bypassing the usual indirect effects via environmental degradation and increased intergroup conflict. Instead of *always* leading to environmental degradation and increasing conflict, expansion serves as an outlet for population growth and leads to acquisition of new territories, resources, and populations, which in turn trigger attempts to find new ways to administer considerably expanded state activities. Two kinds of solutions are particularly useful: increasing hierarchy—both throughout the system, and within its component states—and changing mode of production. If such solutions are found, they will solve the problems of administration and the effect of population pressure again becomes indirect through environmental degradation and intergroup conflict.

This model is only now being developed and admittedly is somewhat sketchy. However, it does solve a difficult problem: the combination of occasional large changes embedded in an interrupted stream of continuous change. These interruptions are generated by the cyclic process of world-systems, not contradictions inherent in states or societies. Thus, world-systems are the key unit of analysis of understanding social evolution. However, the case should not be overstated. This does *not* mean that state- or society-based processes are irrelevant—clearly they are. Rather, it means that they must be embedded or contextualized in larger, world-systemic, processes to be fully understood.

Final Remarks

In this type of paper "conclusion" is inappropriate. Rather, I will close with a softer claim about the utility of a world-systems perspective. By reexamining world history through a world-systemic lens we stand to gain many insights into how societies have changed over the last ten millennia. Much detailed theorizing remains to be done, as does the empirical research upon which it should be based. Archaeologists and anthropologists are particularly well positioned to contribute to this theory-building because so much of their work focuses on local processes. But to do so will require work. They will need to rework world-systems theories. The chapters by Feinman, Kardulias, Kuznar, Morris, and Shutes in this collection show several ways in which this can be done.

Rather than stop at Immanuel Wallerstein's model of the modern world-system, or even at the nascent attempts at precapitalist world-systems theorizing, jump into the fray and add to it. There is room for many competing theories which take intersocietal interactions seriously. It is only by developing and testing such theories that we will achieve a better understanding of how we humans got here —the late twentieth century—and where we might go.

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2

Goodness of Fit: On the Relationship Between Ethnographic Data and World-Systems Theory

Mark T. Shutes

Introduction

The title of this paper reflects a continuing problem for ethnographic research: how can macro-level theories about social change help ethnographers to make broader comparative sense of the changes they observe and analyze at the micro-level? How, in other words, can the ethnographer safely "study-up?" Using three factors that I have found to be useful in the local-level analysis of change, I compare and contrast two European farming groups in order to show how world-systems theory (WST) can enrich our understanding of the changes that are taking place within these groups. Reciprocally, I wish also to demonstrate how local-level analysis of change, accomplished in the manner suggested, can enrich our understanding of how macrolevel changes in economy and hegemony of the sort suggested by WST are actually interpreted and modified at the local level.

This present inquiry is based upon the writings of Chase-Dunn and Hall (1991, 1992, 1993, 1994), that of Frank and Gills (1992, 1993, 1995), Hall and Chase-Dunn (1993, 1994), and of Wallerstein (1974, 1980, 1984, 1989, 1991), and accepts as valid the criticism offered by Frank and Gills (1995) and Hall (1995) that Wallerstein's version of WST is, perhaps, too narrowly conceived and Eurocentric in orientation. World-systems research is, of course, a rapidly expanding and dynamic area, and the references cited above are only given as a general guide to the approach taken in this particular work. For a complete review of the relevant world-systems literature, see Hall (1995).

Local-Level Change and World-Systems Theory

Before initiating this present work, I found myself skeptical of WST, not because of any fundamental objections, such as the novelty of the approach within anthropology or its basic inconsistency with existing anthropological theory and method, for there was ample literature linking WST with anthropology in those

regards (cf. Hall and Chase-Dunn 1993, 1994; Nash 1981). Rather it was because such a broad-based historical theory covering thousands of years of world economic and political change seemed hardly able to contribute in any meaningful way to my further understanding of the micro-processes of change that were taking place in the Greek and Irish groups that I studied. Nor did the bulk of WST seem particularly interested in the kind of findings that my ethnographic data were generating. On both accounts, the scale of the events being described seemed entirely inappropriate, and the degree of complexity that was exhibited at the local level appeared to defy any kind of global general-process explanation. What I had failed to recognize was that, just as I had come to the point in my research where I was looking to "study-up," so certain WST theorists had begun to see the need to "study-down." Consider the following by Frank and Gills (1995:40):

> the world system approach must be extended by research into the causality of the cycles, both the economic and the hegemonic, and their mutual relations. In this regard and even if they may not be causative, the intervention of climatic, ecological, and demographic change, and their relations with each other and in turn with social structural ones have received far less attention than they surely merit. This problematique also invites further research into how local conditions interact with systemic level impulses and stimuli. Specifically, there should also be further research into how local responses affect ascent and decline in the "inter-linked hegemonies" hierarchy.

In a similar vein, Hall (1995:13) states that

> What we need here is not an overthrow or revolution, but a change in perspective. World-system analysts need to . . . study how system-wide processes and dynamics shape local processes and dynamics in transforming, sometimes transmuting, local class, racial/ethnic, and gender relations. We need to devote special attention to how local actors attempt, and sometimes succeed, in resisting, or at least turning to their own advantage, various global forces.

In reading these calls for more local research, I realized that my low-level, pragmatic approach to understanding local social change, what I called

production-oriented ethnography, had the potential to link more strongly their research goals with my own, and that what I had been doing at the local level was, in fact, a form of WST analysis. What follows is an exploratory attempt to demonstrate that linkage through the comparison of two European farming groups.

Production-Oriented Ethnography

Elsewhere, I have stated that any reasonable analysis of the changes taking place within small farming populations should be based upon a data-collection approach that I have called production-oriented ethnography (Shutes 1994). The approach involves three factors that can be summarized as follows:

1. It must incorporate a history of the various forms of capital accumulation introduced into the local rural community, and a careful documentation of the changes in production, and subsequent changes in social relations, that such introductions produced. Given the diverse and differentiated nature of this process, it is quite likely that any local group will exhibit a mixture of production strategies at any given point in time, governed by various forms of capital accumulation, and not simply exhibit a single "modern" or "peasant" strategy (cf. Breathnach and Cawley 1986; Curtin 1986; Curtin and Wilson 1989; Gibbon 1973; Goodman and Redclift 1982; Hannan 1982; Long et al. 1986; Mouzelis 1978; Popkin 1979; Shutes 1991, 1993; Weintraub and Shapira 1975).

2. The core of the historical analysis must be "strategic," that is, it must focus upon the active role that farmers play in making production decisions, and the economic, political and ecological factors that shape such decisions through time (Shutes 1994:340).

3. Finally, given the mix of production strategies, it is also likely that the existing social relations will reflect such a mix of strategies, an on-going "rules negotiation," if you will. The approach must allow the investigator to identify the appropriate social rules that govern production decisions at any point in time, and the conditions under which such rules are "negotiable" (Shutes 1994:341). These three factors are utilized in the comparisons that follow.

Farm Group Comparison

The groups in question are located at the geographic ends of the European Union (EU) in southwestern Ireland and the northern Peloponnesos in Greece, respectively. In many respects they are very much alike. Each shares a common set of market constraints and an emerging, though certainly not finalized, common polity within the EU. Their histories over the past one hundred years also reflect a common transition from mixed farming production (with a

significant subsistence component—cows, cattle and roots crops for the Irish group and wheat, grapes and olives for the Greek group), to commodity production for the national and international marketplace. And, for each, that transition has been sporadic and unpredictable, as various forms of capital accumulation impact upon local production plans. Farmers within each locale have had to adjust their production strategies to these new introductions and come to terms with the inevitable value conflicts and upheavals in social relationships that such adjustments entail. And certainly both groups belong to countries that are political and economic marginals within the EU itself.

But there are also some significant differences between the two populations that have resulted from this change to commodity production.

Monocropping Versus Multicropping. The prevailing environmental conditions in southwestern Ireland gave the farmers in the Irish group only a single option for the marketplace: milk production. This has resulted in the virtual abandonment of the other productive activities of their former mixed farming pattern in favor of dairying. The farmers of the Greek group, on the other hand, were forced to expand their inventory of mixed farming products to include a wide array of other fresh fruits and vegetables in order to accommodate the shift to commodity production for the marketplace.

Disconnected Versus Connected Labor Orientation. To be profitable, the Irish dairy farmers have had to eliminate hired or bartered labor, and depend solely upon the full-time labor of the farming family, supported by individually-owned specialized dairying technology. The Irish farmers, therefore, whose former production strategy strongly tied households to each other in terms of labor dependency, have now become more disconnected and isolated. The Greek farmers, on the other hand, whose former strategy rewarded more disconnected and familistic behaviors, have had to increase their local labor dependencies in order to accommodate the increased variety of crop production that makes their commodity production profitable, and, hence are finding themselves more connected and interdependent at the local level.

Specialized Versus Generalized Capital Expenditure. The Irish farmers must now invest heavily in specialized labor-saving dairying equipment in order to remain competitive and cannot, at present, afford any change in strategy that would demand an increase in capital expenditure. The Greek farm households, in contrast, have had to be extremely flexible in their use of technology in order to be able to accommodate an increasing variety of crops, and so have not invested heavily in any one set of specialized production technologies.

Underutilization Versus Overutilization of Land. The move to specialized dairying for the Irish farmers has increased the competition among local producers for good grazing and silage land, but land which has no value for dairying remains underutilized. The farmers are, therefore, amenable to alternative uses of this land for tourist amenities, housing, and light industries, since they can gain through the sale of land to enterprises that do not compete with their dairying enterprises. The Greek farmers, on the other hand, need every available bit of land to accommodate their multiple commodity strategy, and therefore find themselves in direct competition with other kinds of enterprises. Further, the pressure to over utilize existing land resources places a severe burden on the local ecology, particularly upon available water resources.

International Versus LocallRegional Markets. As far as the farmers in the Irish group are concerned, the broad and highly regulated pricing system of the EU's international market best suits their ability to market their milk at a profit, since no local, regional or Ireland-wide market could ever sustain even the present productive capacity of dairying populations such as theirs. For the Greek farmers, the expanding local and regional markets for highly perishable fresh fruit and vegetables can often prove more profitable than bulk sales of such commodities via the EU. This is particularly true when the EU subsidizes certain varieties of produce that do not grow well under local conditions, or where the produce reflects local/regional tastes only. The farmers in the Greek group, therefore, are wary of the highly regulated pricing systems and internationally standardized markets of the EU, and are more concerned about developing stronger local and regional markets for their produce.

Federation Versus Inter-Government Political Views. As might be surmised from the above, the farmers in the Irish group more often favor continued political integration of the EU nations that will eventually lead to one federation of European states, since this will provide them with the kind of strong central control of the market that they find desirable. The Greek farmers, on the other hand, more often favor an extended period of economic integration with power remaining in the hands of individual member-states acting through intergovernmental councils. This approach is more consistent with their concerns that they have greater freedom to explore and exploit local and regional markets with less central control over their production decisions.

Rules Negotiations

Given the above information, it is possible to conceptualize the Irish farmers as moving away from a set of social rules that I have labeled *parochial* towards one

that I have labeled *cosmopolitan,* whereas the farmers of the Greek group are moving in the opposite direction: from *cosmopolitan to parochial* social rules.

By *parochial* rules I mean social constraints that lead individuals to define their role as a farmer/producer primarily in terms of local standards. Such standards are typically couched in terms of moral and ethical ideals concerning the manner in which a "good person" should behave towards fellow locals. *Parochial* rules tend to predominate in populations where farmers are strongly dependent upon each other's labor and assistance in order to accomplish their own production goals.

By *cosmopolitan* rules I mean social constraints that lead individuals to define their role as a farmer/producer primarily in terms of external standards. These standards are typically couched in terms of the practical realities of being a "good farmer" and the need to insure the success of one's own enterprise. *Cosmopolitan* rules tend to predominate where no such labor dependency exists as a prerequisite for successful individual production.

When I say, therefore, that the Irish farmers are moving away from *parochial* and towards *cosmopolitan* rules, I mean the conditions are such that, when confronted with a decision about a change in production strategy, they will, whenever possible, choose a strategy that decreases their dependence upon other locals and justify their decision by reference to external standards for the "good farmer." Conversely for the Greek group, the conditions are such that, when farmers are confronted with a decision about a change in production strategy, they will, whenever possible, choose a strategy that enhances their interdependence with other group members and justify their decision by reference to local standards for the "good person."

Additionally, it is clear that, although one set of rules may predominate at any given point in time, the possibility for value conflict to disrupt the process of production decisions is always present. Some production decisions are governed by old standards and others by newer ones. Some are the result of creative compromise or invention, given a choice between difficult alternatives. In any event, an awareness of the factors that can influence a farmers' choices about what and how to produce can provide valuable insight into these potentially complex local-level processes. Two examples of farming decisions drawn from my fieldwork in Ireland and Greece, respectively, may prove useful at this juncture.

Case #1. Tomatoes Versus Oranges: Greece

Two farmers, each of whom own small holdings totaling approximately fifteen *stremata* (slightly more than three acres), happen to have their single best fields

of approximately one-half acre contiguous to each other. Their other holdings are scattered throughout the area and located on predominantly hilly and dry soil suitable only for olive cultivation. Each depends upon this larger field, therefore, as a source of stronger cash production, and each farmer had initially planted a variety of oranges that were subsidized by the European Union (EU) in order to minimize the risk. But the subsidized varieties did not grow well in Greece and demanded more and more investment in fertilizer and irrigation in order to maintain a stable crop production. Many orange growers with larger holdings had already shifted their production to other non-subsidized varieties of fruit and relied upon brokers to market their produce outside of the EU. This option was also available to these two farmers, but their production scale was so small that they could not risk the highly variable yearly price that they might receive from outside brokers.

Both fields are suitable for growing tomatoes, zucchini and other fresh produce for the burgeoning local markets in nearby towns and in Athens, some 60 miles to the northeast, but the yield from either field alone would not justify the cost of the intensified and timely labor that such strategies demand. They decided to merge their two fields and to mutually share the labor and costs of vegetable and tomato production and marketing. They broke even during the first year of operation, but now earn more income from their combined activities than either would have earned from their separate production of the ill-growing subsidized oranges, and each is now more empowered in terms of their dealings with large and small food markets. Their families, however, who have inheritance rights in the fields, are worried about how this land can be fairly transmitted in the future, and there is always some grumbling about the amount of labor that one family invests versus the other. The farmers themselves, however, say that these are all things that will work themselves out, and that, after all, what can they do? They must look to more modern means to market crops or their families will have nothing to inherit at all.

Case #2. The Mechanical Calf-Feeder: Ireland

A farmer with a large holding (110 acres) and eighty head of thoroughbred Fresian-Holstein milking cows was an active supporter of Ireland's entry into the EU in 1974, and since that time has been instrumental in convincing many of his smaller farm neighbors to invest in more mechanized equipment and specialize in milk production. In the early 1980s, he became convinced that the EU would soon impose quotas on milk production, which would do severe harm to his small farm neighbors, since it had taken them more time and debt to upgrade the size of their herds just to their present levels, and any reduction in what they could sell to

the market would place many of them into a situation of permanent debt. His own enterprise, because of its size and his early investment in equipment, was far less likely to suffer as markedly from such quotas, but he was greatly disturbed about the growing loss of control over their enterprises that he and his neighbors were suffering, and he felt responsible for leading many of them in that direction.

Prior to entry into the EU, local farmers adjusted to lower income in dairy sales by keeping more of their calves for a year (one winter) and selling them to larger eastern farms for final fattening and sale as beef. Bad years in dairying would be balanced by sale of yearling cattle and bad years of cattle sales could be turned into higher milk production. Only when both failed at the same time, which was rare, would the loss be severe. But the bottom had fallen out of the world beef market since then, and calves now had to be sold right after birth and at markedly lower prices in order for farmers to maintain their capital investment in mechanized dairying.

The farmer in question here reasoned that if the local farmers could find a cheap way to feed the calves and enhance their weight gain in a shorter period of time, they might sell them as "pre-fattened" and gain a market with the eastern farmers again, and, hence, some greater control over their production decisions. Artificial feeds of the sort used prior to the "bust" in the beef market were too expensive to be used for such fattening. The only other thing that produced significant weight-gain in calves in a very short time was milk "straight from the cow," but this method involved separating the dairy herd, was land and labor-intensive, and was unpredictable in terms of individual results.

If, however, he could develop a low-cost device that would supply a large number of calves a constant supply of whole, warm cows' milk diverted from the creamery right after milking, then he could keep both enterprises separate and within minimal labor and land requirements. When the quota "crunch" came, therefore, as he was certain it would, farmers could initially divert the surplus part of their milk supply to the fattening of calves and, through the sale of those at increased weight, gain back their initial losses in milk production. And they could expand or contract either enterprise according to shifting market conditions. Control would be regained.

He spent three years of his own time and money developing the calf-feeding device. He acquired the part-time services of an underemployed engineer and an unemployed machinist, making them partners in the enterprise. When the device was perfected, he spent another year offering it to farmers around the country on a free-trial basis in order to garner data about its effectiveness in producing short-term weight gain. To date, he has sold hundreds of the machines, many at cost, to his own farm neighbors, and may have to go out of farming altogether just to

manage the enterprise in the future. But when you ask him about this particular success, he will say that the best thing about all of it is that he again has the respect and admiration of his neighbors.

In both cases, there is clear evidence of the shifts from one set of rules to another in the manner in which I have suggested for each, although the second case indicates that reversal of such rules is also possible. Identification of the problem and the solution sought for it clearly indicate the strategy of a "good farmer," but at least part of the motivation for carrying out the invention of the calf-feeding device came from the stated desire to be viewed as a "good man" once agan. Both decisions were motivated by a common set of external economic policies of the EU, but in neither case did the farmers behave in the manner in which the policy was designed.

Discussion

In light of the above, I believe that it is not unreasonable to suggest a strong "goodness-of-fit" between my local-level, pragmatic approach to change and the broader claims of WST. Let me review briefly some of their shared aspects.

Active Versus Passive. My approach views individuals as active participants in their lives and production strategies. Crucial shared values, which give substance and meaning to farmer's decisions, are not viewed as monolithic determiners of production activity, but rather as the very stuff which is negotiated as various new kinds of capital accumulation infringe upon existing ones.

System Interaction. My approach views the members of farming groups as participants in a continuous series of political and economic systems that regularly challenge their existing notions of shared meaning, and holds that there has never been a time over the past few hundred years (the limits of my study) where this has not been the case. There have been periods where options for new forms of capital accumulation have been severely restricted, but this cannot be interpreted as evidence for the existence of some timeless period of "pre-modern" peasantry where only one form of production was possible.

Inter-Linked Hegemonies. Both the Greek and the Irish groups herein discussed share a very similar set of historical experiences. Both have moved in a relatively short time from colonial dominance by a foreign power/powers, through a late-developing nationalism, and into a multi-state political and economic union. Each of these experiences has introduced significant changes in production and concomitant social change within both groups, and, although this may be stating the obvious, changes in the balance of world hegemony can be readily referenced to explain each of these periods in their histories.

Hegemonic Transitions. The introduction of new forms of capital accumulation into the two local farming groups has not been met by simple acceptance or rejection, regardless of the source of these new forms. Rather, they are evaluated in terms of local advantage and benefit and modified according to locally-negotiated social rules. The actual intent of the policy introduced by some larger hegemonic entity, therefore, is almost never realized as planned, for although the majority of the local groups may eventually incorporate the new strategy/strategies in some fashion, they will always keep their options open.

Nowhere is this "policy frustration" more clear than in an examination of the changes that have resulted from both groups' participation within the EU. As we have seen, a common agricultural policy has produced diametrically opposed political and economic views of the policy (and the EU itself) at the local level, and any change in existing policy, major or minor, could result in further changes in direction and views by either or both groups. Nor do I believe that it is accidental that these kinds of "local interpretations" are so strongly prevalent within two groups which are both on the periphery of the EU hegemony and marginalized players in the overall agricultural plan. It would seem obvious that, by their very position, such groups can eventually make or break a hegemony, as they pursue their own interests on the boundaries of competing hegemonic interests, and may even, at certain times, produce such power structures themselves, given their keen abilities to successfully negotiate various forms of capital accumulation. The implications of these local processes cannot be lost upon world systems theorists and their concern for the ascent and decline of competing and inter-linked hegemonies. Indeed, this may be the most important role that such local-level ethnographic studies can perform within the framework of WST.

Conclusion

This paper has attempted to demonstrate that there exists a very good fit between a model for rural social change that I developed out of immediate and practical concerns for understanding the strategies of rural producers in two locations and WST. It is frequently the case that those who exhibit an acute interest in ethnography are often chary about the use of broad-based theories to explain the incredible richness and diversity of the human behavior that they encounter in their work. No such theory seems capable of doing explanatory justice to the complexities that they observe locally, and they are far more comfortable with the kind of low-level, pragmatic explanations that hover only slightly above the actual decisions made by locals in carrying out their productive lives. This has been the case for my work on rural decision-making. The value of WST, as I have discovered in this particular project, is that all of my ethnographic objections to it

are met and incorporated. Not only can I retain my observation-based convictions that human beings everywhere are dynamic and active participants in the changing world that they encounter, but I can also safely "study-up" within the framework of a general theory that seems to embrace a similar set of methodological assumptions and theoretical convictions, and that also recognizes its own need to "study-down." Certainly there are other aspects of local life that play a role in these processes besides production, such as gender, ethnicity, migration, and the introduction of new kinds of consumer goods, but as long as they share a common flexible set of methodological and theoretical assumptions of the sort I have identified for production decisions, both ethnographic analysis and WST will only benefit through their mutual association.

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3

Legitimation Crises in Prehistoric Worlds

Peter N. Peregrine

Introduction

If the world-systems perspective is indeed rooted in the proposition that "everything is process," as Wallerstein stated in his seminal 1974 article, then collapse (which I define following Tainter [1988:4] as a significant loss of an established level of sociopolitical complexity) should be one of the processes in which we are interested. In fact, our work should equally weigh rise and collapse, centralization and decentralization, growth and decline, viewing them as alternate outcomes of a singular process of world-system operation, rather than as polar opposites—one occurring when a world-system is functioning well, the other when it has broken down. Despite this, world-systems analyses have rarely focused on collapse, even though world-systems theory should be particularly useful for investigating collapse because crisis in one part of the system could, due to the interdependency of polities in the world-system, lead to crisis in the system as a whole—a process that seems common (Tainter 1988).

Existing theories of collapse tend to assume environmental crises or failures in the subsistence economy are the basis of collapse, and often this assumption is not clearly articulated. A perusal of Tainter's (1988:39-90) comprehensive summary of these theories will demonstrate that many discussions of collapse, while not explicitly concerned with the environment or subsistence economy, implicitly describe collapse in terms of environmental degradation, overpopulation, increasingly marginal returns on the energy put into complexity (Tainter's own view—1988: 118-123), or the like. In short, these theories implicitly link collapse to crisis in the subsistence economy, to a crisis in the ability of individuals to maintain life processes (also see the papers in Yoffee and Cowgill 1988). In contrast, I suggest collapse is equally likely to stem from a crisis in social reproduction—from an inability of individuals to sustain themselves socially—and not from individuals' inability to sustain themselves physically.

This chapter considers the collapse of world-systems and posits a theory emphasizing social reproduction to explain why repeated patterns of rise and decline appear so common (Anderson 1994; Blanton et al. 1996). The theory is rooted in the work of Jurgen Habermas, a controversial figure whose sociological writings are difficult, uneven, and often flawed (see, for example, Bernstein 1985), but one whose insights into the workings of the capitalist world-system, and, by extension, other premodern world-systems, have been overlooked. To be fair, both to Habermas and to world-systems theorists, Habermas has never embraced the world-systems perspective and has never talked about the capitalist "world-system." However, Habermas's work on the culture of late capitalism is explicitly cybernetic in approach, and Habermas views capitalism as a holistic system of interdependent polities, much as Wallerstein does. Habermas lacks the specific theories of world-system process, of geographic differentiation and competition, and of unequal exchange and uneven development, but his ideas are, I suggest, amenable to the world-systems perspective, and can easily be incorporated into it.

The primary distinction between Habermas's perspective and a strictly world-systems one is that Habermas views the economic, political, and social subsystems of capitalism as having equal importance. In other words, the economy is not seen to be the only, or even the most important, force in the system's operation. Indeed Habermas (1973) argues that these three subsystems are so intertwined that they cannot be reasonably separated. His insistence that the political and social be given equal weight to the economic is a product both of his philosophy of "communicative action," which envisions all social forms as created through communication between "rational" individuals, and his understanding of how the capitalist system operates (see Habermas 1976).

Figure 3.1 is a diagram of Habermas's (1973) conception of the capitalist system. On the far left is the economic system, the privately-owned enterprises which produce goods and services for profit. The arrows going to and from it show how it is aided by the political system, which develops laws and policies beneficial to economic interests, and which works with other polities to maintain favorable conditions for growth. In this way, the political system helps to steer the economic system to maximum performance for private, profit-driven interests. In return, the economic system financially supports the political system, which cannot maintain itself otherwise since it produces nothing beyond steering the economic system and providing social welfare, which leads to the other side of the diagram.

The right side of Figure 3.1 shows the sociocultural system, basically the traditions, beliefs, norms, values, expectations, and the like, which are shared by

members of the polity. As the figure shows, these traditions are aided by the polity through social welfare programs which support them, leading, in turn, to mass popular support for the polity. The political system uses financial resources generated through the economic system to support the sociocultural system, which, in turn, legitimates the polity's existence and right to govern, i.e., its right to create and implement laws and policies beneficial to the maximum operation of the economic system. This interdependency is the basis of Habermas's view of capitalist societies and the basis of his conception of legitimation crises.

Because the three systems are tightly interdependent, a crisis in any one of them may lead to a systemic crisis of the whole. However, Habermas (1973) suggests that the weak point in the system is in the "mass loyalty" arrow leading from the sociocultural system to the political system. His reason for this assertion is complicated, but is basically that the political system can control everything except people's "rational" minds, and crises in any part of the system tend to produce crises in legitimation, precisely because it cannot be readily controlled. Habermas's insight is crucial for the discussion of collapse in world-systems. What Habermas argues is that an environmental calamity or crisis in the subsistence economy is not a necessary, or even common, precondition for collapse; rather, a crisis in the sociocultural system, a legitimation crisis, is a more likely source of political collapse.

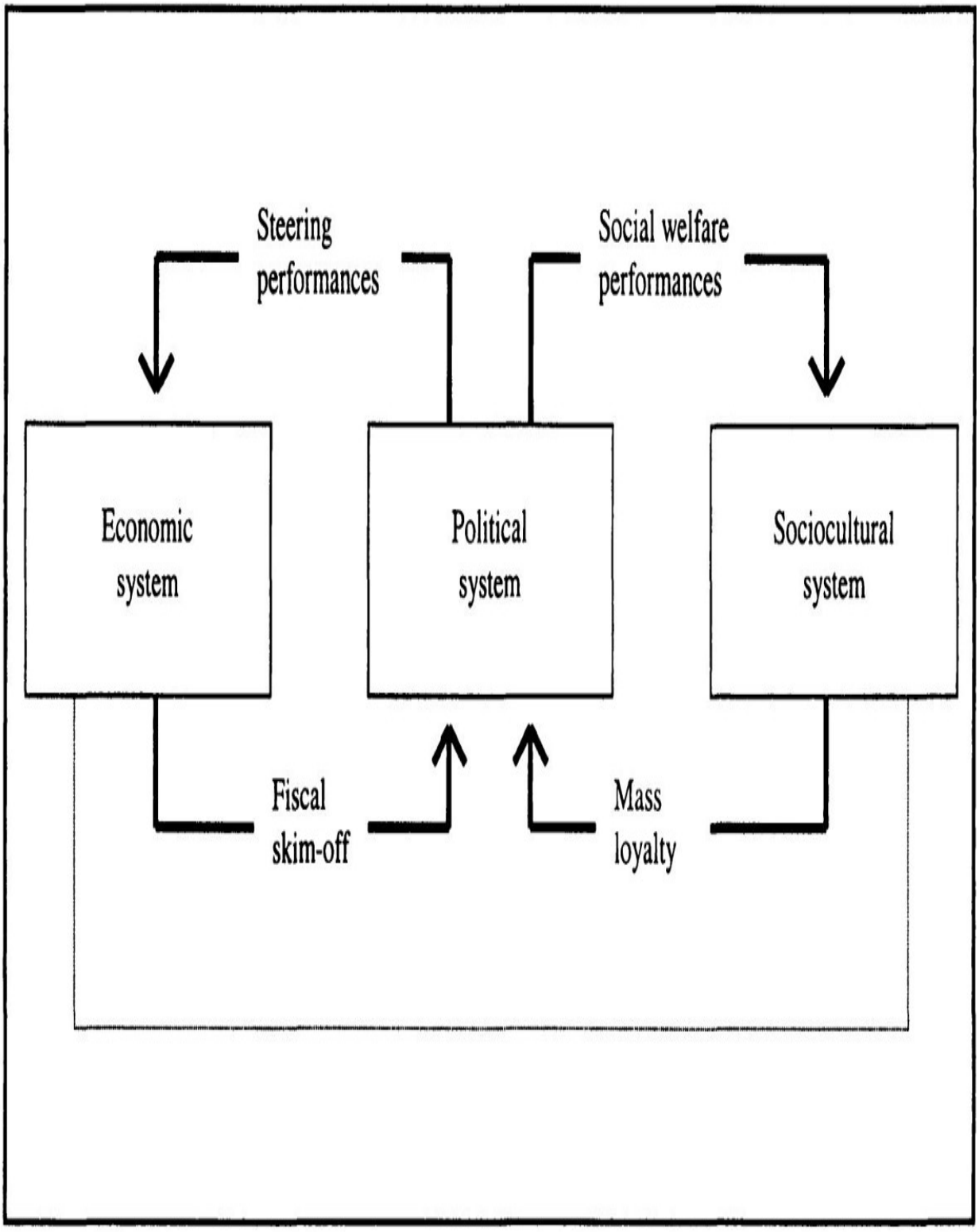
Steering performances
Social welfare performances
Economic system
Political system
Sociocultural system
Fiscal skim-off
Mass loyalty

***Figure 3.1**. Habermas's conception of capitalist sociopolitical organization (adopted from Habermas 1973:5).*

Clearly there are some unique features of capitalism that both illuminate and confuse Habermas's perspective as applied to noncapitalist societies, particularly the intimate link between knowledge, power, and capital (Lyotard 1984), but it is my assertion that the interrelated system Habermas proposes for capitalist societies exists in all politically centralized societies, albeit not in the same manner as it does in capitalist ones. One clear problem with Habermas' model is that he fails to emphasize the importance of social reproduction. Habermas focuses solely on what I call the subsistence economy, and not on what I call the prestige economy, the system through which individuals create and maintain social standing, prestige, power, and the like. I argue that maintaining these are vitally important (sometimes even more important than maintaining life) in all societies, even capitalist ones.

I suggest we can revise Habermas's diagram to give emphasis to social reproduction by replacing the "economic system" with "prestige-system," the "political system" with "elites," and the "sociocultural system" with "non-elites." In the revised diagram (Figure 3.2), "prestige-system" represents the myriad of ways in which prestige is accrued and maintained in the society. It includes knowledge, rituals, and symbols which convey and display status. Elites help to "steer" the prestige-system through sumptuary laws, policies, and regulations. By guiding this system, the elites effectively ensure their own status, but they also provide opportunities for status enhancement to their followers, the non-elites in the system. The non-elites, in return, provide loyalty to the elites.

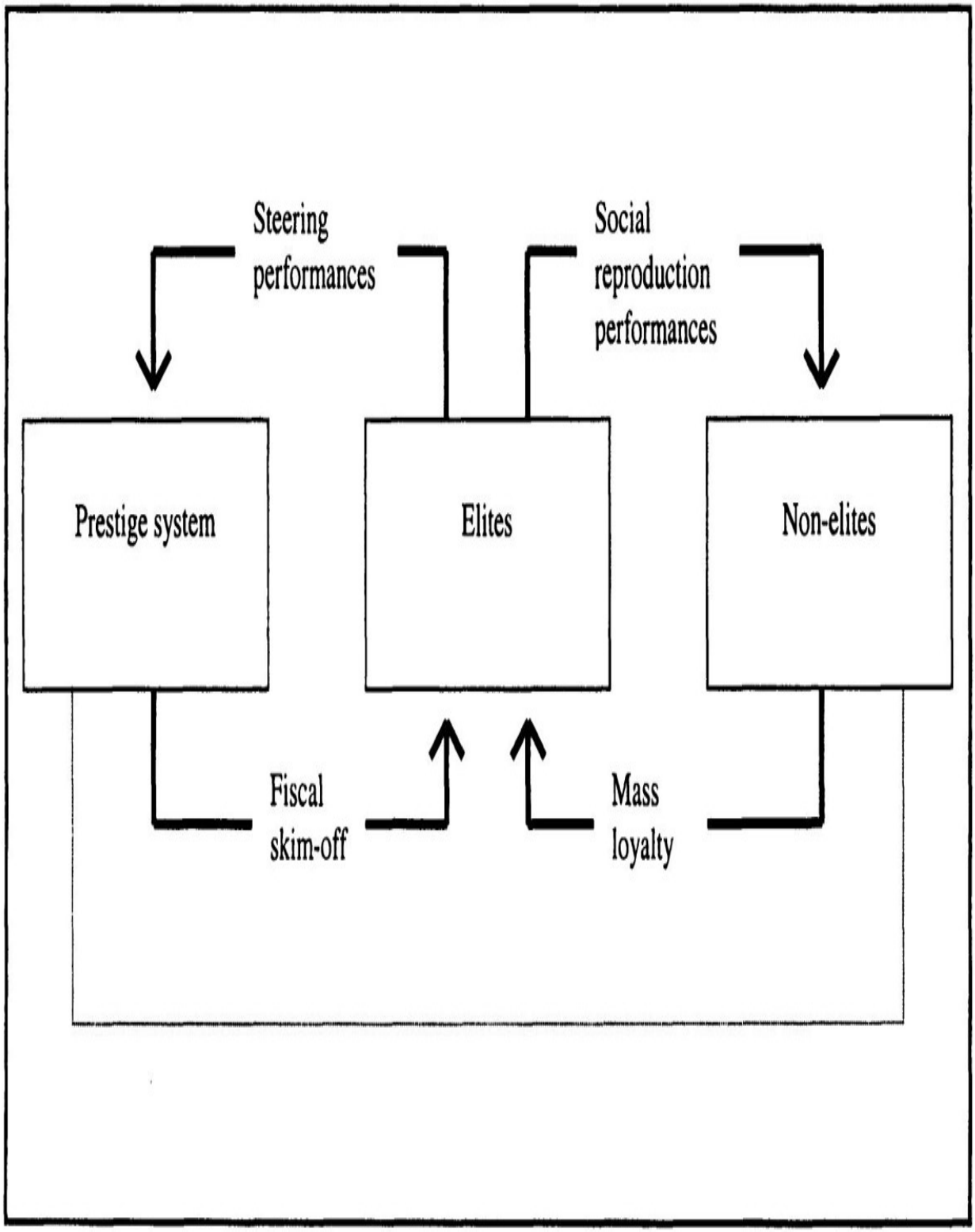
Steering performances
Social reproduction performances
Prestige system
Elites
Non-elites
Fiscal skim-off
Mass loyalty

***Figure 3.2**. Habermas's conception of sociopolitical organization revised to emphasize social reproduction.*

The system works similarly to the way Habermas sees capitalism operating, except that profit here is in terms of prestige rather than of capital. Also, there are either no individuals who uniquely control the economic sector (i.e., who own the "means of production"), or if there are, they are the elites who run the political sector. In other words, elite manipulation is not focused on production to sustain life, but rather on sustaining systems of social reproduction. An example may help illustrate this idea.[1]

The Tongan Polity

The Tongan archipelago is located in the Pacific Ocean some 2,000 miles east of Australia and 600 miles southeast of Fiji. It consists of about 160 islands strung out over 200 miles on a roughly northeast-southwest axis (Kirsch 1984:217). The population in the 1920s was about 25,000, most of whom lived on the three large islands of the archipelago (Gifford 1929:4): Tongatabu (100 square miles); Haapai (20 square miles); and Vavau (46 square miles), and most of the land area was given over to fields and stands of yam, taro, sweet potato, breadfruit, plantains, and coconuts (Goldman 1970:281).

At the time of first contact with Europeans (ca. 1643), Tonga had a dual political structure, with two major leaders: the *Tu'i Tonga,* who was considered divine, and was the link between humans and deities; and the *Tu'i Kanokupolu,* who answered only to the Tu'i Tonga, and was responsible for secular concerns in the chiefdom (Kirsch 1984:224-25). As described by Basil Thompson (quoted in Kirsch 1984:225):

> [the spiritual king]—the Tu'i Tonga—was lord of the soil, and enjoyed divine honours in virtue of his immortal origin. . . . The temporal king—the Tu'i Kanokubolu—was the irresponsible sovereign of the people, wielding absolute power of life and death over his subjects, and was charged with the burden of the civil government and the ordering of the tribute due to the gods and their earthly representative, the Tu'i Tonga.

Both the Tu'i Tonga and the Tu'i Kanokupolu had a group of four chiefs and attendants who were known as *falefa,* and served as the Tu'i's courtiers (Kirsch 1984:230-31). Subservient to the Tu'i Kanokupolu's falefa were a number of

local, landholding chiefs, or *eiki,* their attendants, or *matapule.* Subservient to the landholding chiefs were lesser chiefs, also called matapule, hereditary titled craftsmen, or *tohunga,* and finally commoners, or *tua* (Kirsch 1984:231-32).

Irving Goldman (1970:314-315) offers an interesting outline of the Tongan political structure through what he describes as four segments of political hierarchy. The first segment refers to the Tu'i Tonga and Tu'i Kanokupolu, who maintain ultimate power in Tonga. The second segment refers to the chiefs of landholding lineages, who "were in virtually all respects sovereign in their own jurisdiction. Each major lineage was a replica of the entire administration" (Goldman 1970:315). The third segment refers to subchiefs of the major landholding lineages, "and for its most part a replica in most respects of the major branch, dependent on the major as the major was on the Tu'i Tonga or his representatives" (Goldman 1970:315). Finally, the fourth segment refers to the patrilocal household. Goldman (1970:315) tells us that "A hierarchy of successive dependencies was the ancient Tongan scheme," and at the base was the patrilocal household.

The organization of these patrilocal households was reproduced in the political hierarchy of Tonga. Generation and sex were the basis of rank within the family, and rank was the basis of political power: "The first-born son took the title, the social position, and the leadership in the family" (Goldman 1970:289). Although sisters outranked brothers in formal honor, females did not hold political office or power in Tonga, and the head of the family was the eldest male, and was succeeded by his younger brother or eldest child (Gifford 1929:20, 290).

This patrilineal ranking between fathers and sons, older brothers and younger brothers, was reproduced in the political hierarchy of Tonga, and formed a base for legitimating power. As Gifford (1929:19) explains:

> Ranking of individuals within the Tongan family . . . is the key to the organization of Tongan society in every stratum. From the bottom to top and from top to bottom of the social ladder one general scheme of family organization prevails. As the Tu'i Tonga is *eiki* (chief) to his younger brothers, so in every Tongan family the older brother is chief to his younger brothers . . . Relatively speaking, in every household there are chiefs and commoners.

The reproduction of this system of generational ranking throughout the Tongan political hierarchy is obvious in the nature of political relationships:

> Titled chiefs stand in certain fixed relationship to one another. Thus Ata, the "dean" of the Tongan chiefs is "grandfather" (kui) to all of the chiefs in the kingdom, except the Haa Ngata Motua chiefs, to whom he is "older brother" (taokete). . . . These are not true relationships, even though considered as extensions of terms for lineal relatives to collateral relatives. They are, if anything, mirrors of the relationships in which the first title bearers stood to one another (Gifford 1929:128).

Primogeniture, Marriage, and Power in Tonga

Power in Tonga was held, at all levels, by social elders. In the family, the eldest member served as head. Lineage chiefs were considered the socially eldest in the lineage. Higher chiefs were "grandfather" or "older brother" to lesser chiefs, and all the chiefs were descended from the Tu'i Tonga. The power elders had over subordinates was derived, in part, from their control of prestige-goods.

Prestige-goods were a vital part of Tongan marriage alliances, and hence, were vital to an individual's ability to marry well. Prestige-goods in Tonga were controlled at the highest level, by the Tu'i Tonga and the Tu'i Kanokupolu. They flowed down the levels of hierarchy, and were a central force in maintaining hierarchical relationships. Kirsch (1984:238) makes this point very clear:

> Tonga stands unique among the indigenous Polynesian chiefdoms for its extensive and regular long-distance exchange relations with societies beyond its own geographic and political borders. This long-distance exchange had political consequences which were far greater than any immediate, utilitarian gain due to the importation of exotic material items. Long-distance exchange of chiefly spouses as well as of material items was fundamentally a political strategy, and played a vital role in binding the core islands and outliers to the central polity.

Marriage payments, and the social prestige that went along with them, were described in detail by Gifford (1929:192-193):

> Preceding the day of the beginning of the [wedding] ceremony, the fathers of the bride and groom each assembled a large gift, including tapa, mats, and oil. The particular father notified all his relatives and all his wife's relatives of the coming ceremony and asked for contributions. . . . In distributing the

> presents, the bridegroom's father or other official representative of his people . . . had in mind what each person had donated toward the present that had been given to the bride's people, and each got his original gift returned in double quantity. In accomplishing this return, the distributor often stripped his own house of all its material property. If he should fail to complete the traditional remuneration to all concerned, his unmarried sons and daughters and the progeny of his married children lost face and might consequently fail to contract desirable marriages. . . . A similar distribution was made of the presents of the bridegroom's people to the bride's people.

If there was great inequality in the size of the wedding gifts, the group making the smaller donation was shamed and lost social prestige to the other group.

In Tongan society, marriage with an eldest son or daughter virtually determined the status of one's children, grandchildren, and lineage. As Gifford explains:

> a commoner is an individual who by virtue of descent through a series of younger brothers has in the course of generations become further and further removed from the patriarchal head of the family, as represented by a continuous line of successive eldest sons. . . . The commoner is the man in a line of descent that gets further and further from the head of the lineage with each succeeding generation (Gifford 1929: 20, 112).

A Tongan's social position was relatively fixed. Although there was some room for movement, the status of his lineage, his parents, and his birth-order, all more-or-less determined his status. The potential status of his children, his grandchildren, and, in the long run his lineage, were, however, dependent upon marriages. By continuously "marrying up" in the Tongan hierarchy, an individual's children, grandchildren, and lineage could slowly increase their status. Just as a commoner was the product of a long line of younger brothers, so a chief was the product of a long line of elder siblings. The goal of Tongan marriage was to keep one's relatives marrying elders.

There was tremendous pressure to meet marriage payments and to make them extravagant, so that one's descendants would not lose rank through a poor marriage. Since prestige goods were needed for these payments, and the payments made possible marriage with a socially elder individual, those who controlled prestige goods controlled individuals' abilities to socially reproduce themselves, as Kirsch (1984:241) makes clear:

> Kinship alliances linked the paramount lines with those of the local ruling chiefs in the core islands and outliers. Such alliances were confirmed by marriage relations, for which exotic prestige goods were vital. In turn. the outlying islands affirmed their inferior status and loyalty to the *hau* [Tu'i Kanokupolu] and the Tu'i Tonga through the tribute of the *'inasi.* Thus within the chiefdom there was a circular flow of goods, tribute inwards towards the paramounts, prestige goods outwards to the local chiefs. Monopolization of the sources of prestige goods by the paramounts helped to secure their power over the system as a whole.

Tongan social elites controlled prestige goods needed by their subordinates to socially reproduce themselves. A dependent relationship thereby existed between elders and subordinates, that served to keep the elders in power and able to control younger members of society. This relationship is diagramed in Figure 3.3.

At the center of Figure 3.3 are the Tongan elites, the Tu'is and the other nobility. Through them prestige-goods, rituals, and advantageous marriage arrangements (which are, as discussed earlier, dependent, in part, on access to prestige goods) flow to the non-elites, or Tua, on the right side of the diagram. The Tua, in return, support the nobility. The left side of Figure 3.3 shows the external trade in prestige goods and, to some extent, marriage partners conducted by the Tu'is and their representatives. The Tu'is and other nobles conduct and manage this trade, as well as the local distribution of traded goods, and by doing so enhance their own noble status. In addition, the nobles control ritual knowledge and its dissemination, another arena for status enhancement and reinforcement. Clearly a weak point in this system is the foreign trade in prestige goods. If broken, this weak point could easily lead to a legitimation crisis.

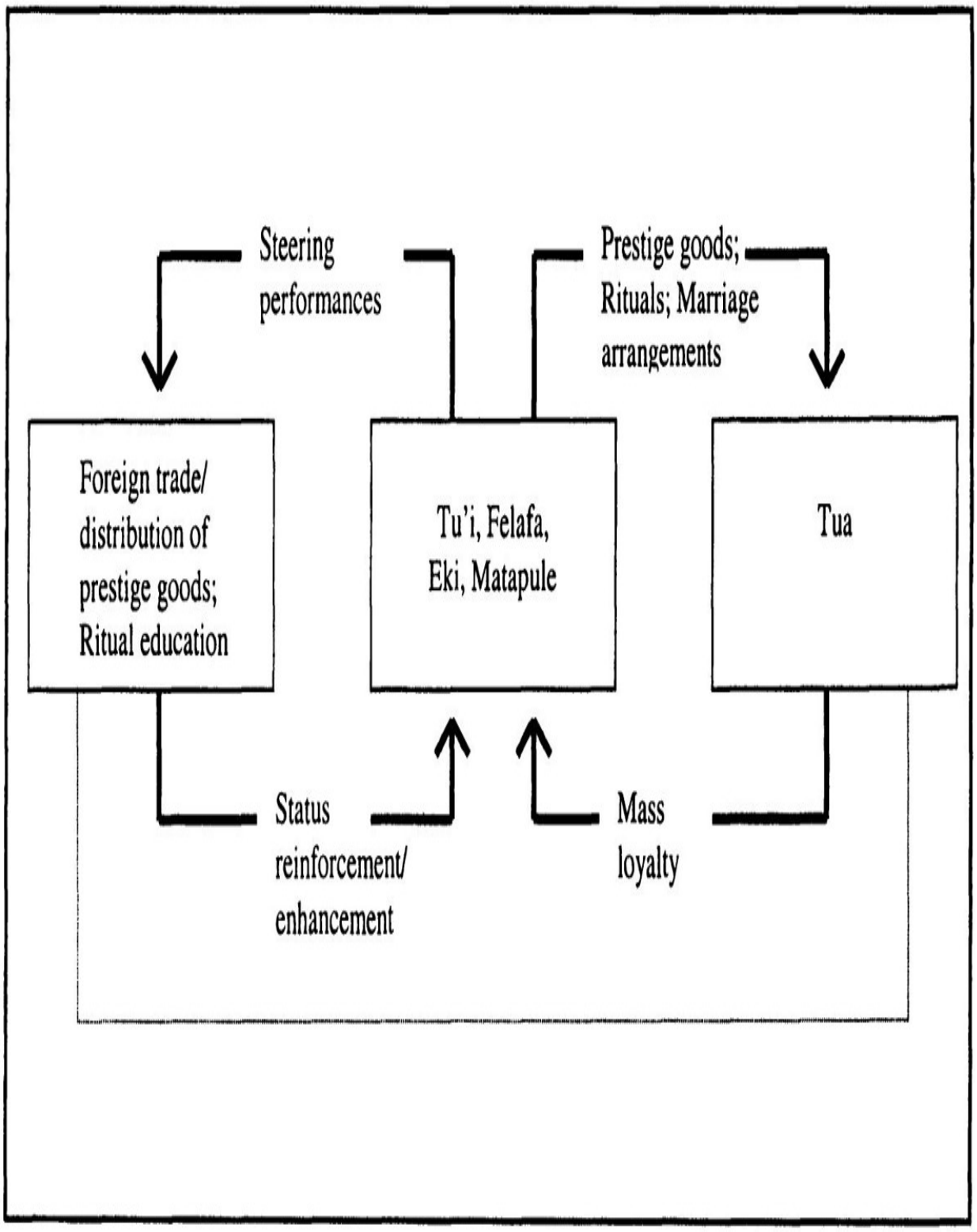

***Figure 3.3**. Revised conception of sociopolitical organization applied to Tonga.*

If trade were cut off, an important avenue for both status enhancement and, more importantly, the maintenance of mass loyalty would be severed. If the nobility could not find another avenue to reinforce mass loyalty, perhaps through new, locally-manufactured prestige goods, fulfilling ritual or supernatural needs, or some other mechanism, a legitimation crisis could ensue, perhaps causing a collapse of the political structure. In the Tongan case, this did not occur; however, during a period of civil war among rival Tu'is and their followers, ties with Europeans that provided status-enhancing trade objects and supernatural knowledge (or Christianity) were actively sought by the contending elites (see, for example, Thompson 1894:314-318; Vason 1810:75-83). Indeed, Latukefa (1974:66-67) suggests that the ultimate reunification of the Tongan Islands under Taufa'ahau (commonly known as King George, in power from 1833-1893) was achieved through a political strategy which included his open acceptance of Christianity and support for new sources of status and power afforded by Christian missionaries (also see Thompson 1894:346-352).

There are many cases which end differently, that is, in legitimation crisis and collapse. One such case, I suggest, is the prehistoric Moundville polity of west-central Alabama.

The Moundville Polity

The Moundville polity represents one of the pinnacles of cultural evolution in eastern North America. Moundville is part of the larger Mississippian cultural system, which evolved beginning about A.D. 900 in the Mississippi River valley and its major tributaries. The Mississippians developed large population centers, traded with peoples as distant as the Florida Gulf coast and the Great Plains, and constructed the largest pre-Columbian structures north of Mexico. Mississippian influence spread across eastern North America in the following century, and by A.D. 1100 it was the predominant culture across the Southeast and had fundamentally influenced peoples in the Ohio River region, in the northern Mississippi River valley, and west into Iowa, Kansas, and Oklahoma. This influence continued even as some of the earliest Mississippian polities, including Moundville, declined beginning about A.D. 1200. Although altered by time and restricted in their geographical range, Mississippian-like ways of life still existed in parts of the Southeast and the lower Mississippi River valley when Europeans first entered the North American continent.

The Moundville polity was located on the Black Warrior River in west-central Alabama, and was inhabited from ca. A.D. 1000 to ca. A.D. 1450. The site itself consists of 20 mounds covering an area of more than 40 hectares. The mounds encircled a large plaza that formed the political or religious center for the

encircled region. Residential areas surrounded this plaza-mound complex, and the entire site was surrounded by a defensive palisade. At its peak, 3,000 or more people may have lived within the palisade at Moundville. Surrounding Moundville are a series of smaller villages and hamlets linked to the larger polity, and likely provided both material goods and labor to it (Welch 1991).

Sociopolitical organization in the Moundville polity was hierarchical, elites having clearly differential access to food resources and exotic goods (Welch 1991; Powell 1988), and is most readily classified as a chiefdom (Peebles and Kus 1977). Welch (1991) tested four models of chiefdom political economy (redistribution, mobilization, tributary, and prestige goods) against the archaeological record of the Moundville polity. He found that the prestige-goods model best fits the archaeological data. This type of political economy is quite similar to that described for Tonga, with lineage-based chiefs maintaining control over status-displaying or enhancing goods obtained through foreign trade. They provide some of these goods to followers in return for their support, both political and material. Hence Moundville's elites would have been deeply involved in foreign trade and the production of goods for foreign trade, and in the creation and maintenance of symbol systems and ritual behaviors that required prestige goods (also see Peregrine 1992, 1995).[2]

Pauketat (1994) recently examined the Cahokia polity, a contemporary of the Moundville polity located in East St. Louis, Illinois, to explore the ideology which sustained political hierarchy. He argued that Cahokian ideology initially was based on a patron-client relationship which developed through time into a divine-secular relationship. Cahokian chiefs initially legitimated their authority through their generosity with material goods and by supporting craft specialists, but reinforced it through external alliances and claims to esoteric knowledge of distant peoples, places, technologies, and behaviors, and, ultimately, of the supernatural. A similar situation was likely present in the Moundville polity.

Political power in the Moundville polity, then, appears to have been based upon the ability to control prestige goods, legitimated in part through a lineage structure (Anderson 1994; Knight 1990; Peregrine 1992, 1995; Welch 1991), but also through differential access to both external allies and supernatural power (Pauketat 1994). In this way, the Moundville polity is quite similar to Tonga. Like Tonga, the organization of settlement suggests that a hierarchy of chiefs was present in the Moundville polity, with the preeminent chief located at the major center of Moundville itself, and lower level chiefs located at minor centers and in outlying hamlets (Peebles and Kus 1977; Steponaitis 1978). The political hierarchy itself was probably organized like a lineage (Knight 1990), with individuals in each level both superior and socially "elder" to individuals in levels

below them (DePratter 1983:100-110). At the lowest level in the political hierarchy were localized lineages, with elder males as their heads.

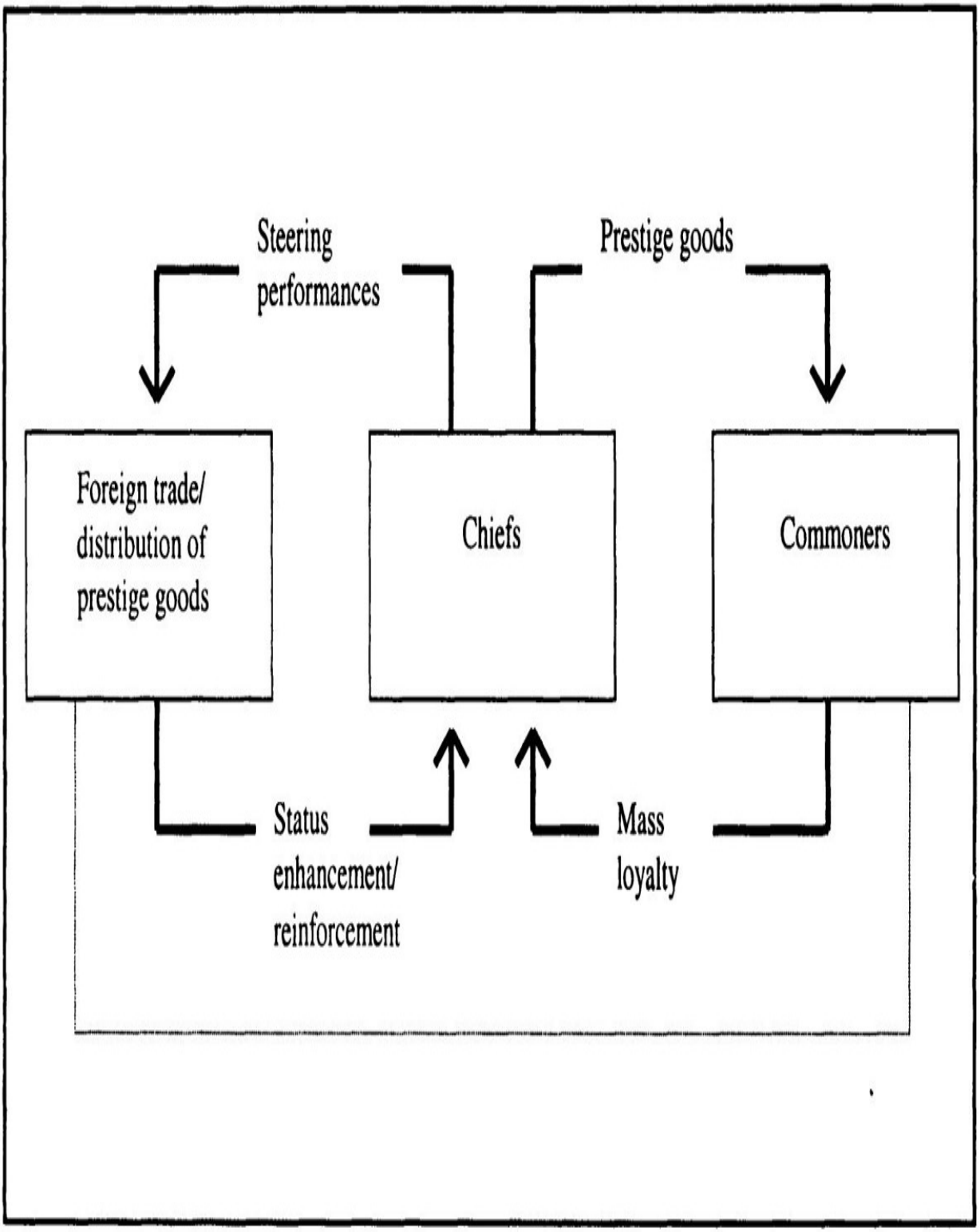
Steering performances
Prestige goods
Foreign trade/ distribution of prestige goods
Chiefs
Commoners
Status enhancement/ reinforcement
Mass loyalty

***Figure 3.4**. Revised conception of sociopolitical organization applied to Moundville.*

In this way, the schematic diagram of the Moundville polity in terms of Habermas's model presented in Figure 3.4 is very similar to that for Tonga. Chiefs, in the center, distributed prestige goods (and likely ritual knowledge) to their followers, who in return supported the chiefs through their loyalty. Chiefs also engaged in long-distance trade for prestige goods, which they distributed internally, both reinforcing their status and allowing them the opportunity to enhance the status of followers.

Collapse of the Moundville Polity

By A.D. 1500, Moundville had collapsed as a political entity. Moundville itself was abandoned and the socio-political hierarchy which it supported had disappeared. Christopher Peebles (1987a, 1987b) argues that Moundville's collapse was induced, in part, by a constriction of trade in prestige goods. Data from the Moundville site and the Lubbub Creek locality demonstrate a marked decline in imported prestige goods beginning about A.D. 1400 (Peebles 1987a, 1987b). Figure 3.5 presents the data on which this argument is based. The Roman numerals on the X-axis refer to the archaeological phases at Moundville. The numbers on the Y-axis are figures for the abundance of these goods in dated burials, standardized by dividing the number of goods by the number of dated burials per phase (see Steponaitis 1991). Clearly these imported preciosities are most abundant in the late Moundville I (A.D. 1050-1250) phase and the Moundville II (A.D. 1250-1400) phase. A rapid decline in abundance occurs beginning in the Moundville III (A.D. 1400-1550) phase, and Moundville has collapsed by the Moundville IV (ca. A.D. 1550) phase.

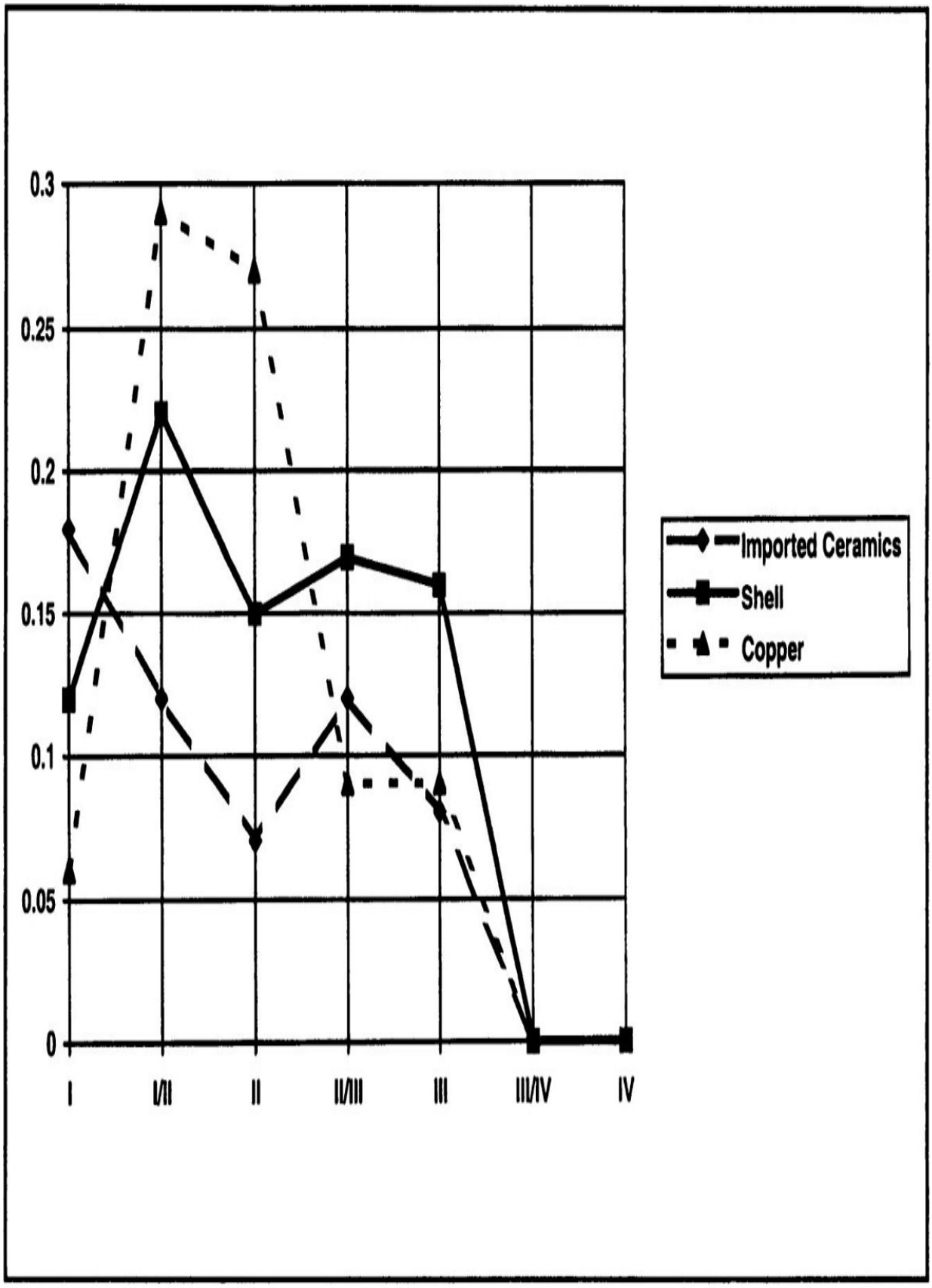
0.3
0.25
0.2
0.15
0.1
0.05
0
I
I/II
II
II/III
III
III/IV
IV
Imported Ceramics
Shell
Copper

***Figure 3.5**. Abundance of selected imported goods per dated burial at Moundville (based on data in Welch 1991:196-197).*

Paul Welch (1991:194) explains the effect this decline in access to prestige goods might have had on the Moundville polity: "if a large number of legitimizing symbols are persistently or chronically unavailable, the system of statuses is likely to break down." Linking Welch's statement to the diagram presented in Figure 3.4 gives us a clear picture of an ensuing collapse. On the left side of the diagram, the chief's steering of trade in prestige goods apparently faltered. Their ability to enhance and/or reinforce their own status is thereby adversely affected. More significantly, their ability to distribute prestige goods to followers on the right side of the diagram is affected. This, in turn, affects the commoner's loyalty to the chiefs, leading, ultimately, to a legitimation crisis and political collapse.

What would this collapse look like? I suggest it would look as if the top level of the political hierarchy was simply cut off—as if the commoners simply "voted with their feet" and organized themselves at a lower level of political integration. One would not expect to see evidence of conquest, one would not expect to see evidence of environmental or economic calamity, and one would not expect to see a population decline.

The collapse of the Moundville polity was not preceded by a population decline (Peebles 1987a:9). There is no evidence of conquest or of environmental catastrophe. What does seem to happen is that small, low-level political centers of the Moundville polity become independent political entities (Steponaitis 1991). Settlement becomes more dispersed and there is a tendency for new settlements to be established in locations which had not been settled during the height of the Moundville polity (Peebles 1986, 1987a, 1987b; cf. Steponaitis 1991:202). In short, the picture that emerges fits exactly with what one would expect from a collapse due to a legitimation crisis.

Conclusion

Collapse is a fact of life for complex society, and while collapse may stem from environmental and economic problems, the point I hope I have made here is that an equally compelling source of crisis is the system of prestige which legitimates and supports the elite groups in the society. The prestige system is not epiphenomenal to the economic system, but a separate and essential element of

sociopolitical organization in all complex societies. Unfortunately, scholars have tended to downplay this part of society and to emphasize the subsistence economy.

In this chapter, I have presented one case of collapse in which subsistence, population, and the environment seem to have had little influence. I suggest the Moundville polity collapsed through a legitimation crisis stemming from a constriction of the interregional trade in prestige-goods. The Moundville polity functioned as a prestige-goods system, in which political authority in part rested on controlling access to objects required for social reproduction and status display. When those in positions of authority found it impossible to maintain regular access to these goods, a crisis with systemic consequences ensued. While this paper offers no explanation of why trade in these goods became constricted (but see Peebles 1987a, 1987b for some ideas), this does not discount the important conclusion that collapse, in this case, was apparently not related to the subsistence economy or the environment; rather, it was a consequence of a failure in the prestige-economy and a transformation of long-standing patterns of interregional interaction. It is the concept of legitimation crises as a potent force in social change which I hope I have successfully conveyed in this paper, but another, perhaps more subtle point I hope I have made is that crisis and collapse have many sources, and we must be willing to look beyond the subsistence economy if we hope to understand them.

Legitimation crises, too, have many potential sources, and it would be myopic to focus solely on transformations of interregional interactions. Some areas that might prove valuable to investigate include the effect of new ideologies, the decay of existing ideologies, and conflicts stemming from succession to office. The effect of new ideologies on the legitimation of an existing political order has already been seen in the case of Tonga, where King George purposely used Christianity as an alternative ideology to separate himself from rival political figures—a strategy that has been repeated in many parts of the world (see, for example, Ekholm (1972) on the Kongo Kingdom of west Africa and Axtell (1985) on various Indian polities of eastern North America).

The decay of existing ideologies as a potent force of cultural change is an idea that has been put forward most lucidly by the literary critic Fredric Jameson (1981; also see Dowling 1984). Jameson argues that in every society there are contradictions and conflicts which are necessary for the society to continue but which would drive the society apart if they were universally recognized. For this reason, societies develop what Jameson calls “strategies of containment” to mask these underlying conflicts (Jameson 1981:10, 193, 269-271). These “strategies of containment” are constantly decaying and must be either actively reinforced or, if

the decay has spread too far, transformed (Jameson 1981:97). It seems reasonable to assume that a failure to successfully transform a decaying "strategy of containment" could be a source of legitimation crisis.

Finally, crises stemming from succession to office have been the stuff of European history for centuries, but they have only recently been explored in non-Western and pre-Modern societies. One of the best pieces of work carrying the problems of succession to office into the ethnographic and archaeological literature comes from the archaeologist David G. Anderson (1994) who explores chiefdom "cycling," that is, the cyclical consolidation and collapse of polities, in the Savannah River valley of Georgia. Anderson argues that the kin-based political structure of chiefdoms contains an inherent contradiction: a chief's closest relatives are generally his strongest supporters and best allies, but they are also his greatest potential rivals and successors. Given this contradiction, rivalry, particularly over succession to office, repeatedly builds to crisis and collapse (Anderson 1994:330).

These, and other, potential sources of legitimation crisis help to explain the apparent instability of centralized political systems, regardless of their environment, their subsistence, their size. As Tainter (1988:1) put it: "civilizations are fragile, impermanent things." I suggest, and it is yet another point I hope I have made in this chapter, that centralized polities are fragile and impermanent *precisely because* there are so many potential sources of crisis. Looking only at the environment or subsistence economy unnecessarily limits our understanding of these varied sources and we must, I argue, look beyond them if we hope to understand collapse.

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Notes

1 As defined in two seminal papers by Friedman and Rowlands (1977) and Frankenstein and Rowlands (1978), prestige-goods systems exist when important aspects of political alliance or social reproduction are tied to the consumption or exchange of specific exotic preciosities that can only be obtained through foreign trade. Frankenstein and Rowlands (1978:76) lucidly explain the economic logic of prestige-goods systems:

> The specific economic characteristics of a prestige-goods system are dominated by the political advantage gained through exercising control over access to resources that can only be obtained through external trade. However, these are not the resources required for general material well-being or for the manufacture of tools and other utilitarian items. Instead, emphasis is placed on controlling the acquisition of wealth objects needed in social transactions, and the payment of social debts. Groups are linked to each other through the competitive exchange of wealth objects as gifts and feasting in continuous cycles of status rivalry. Descent groups reproduce themselves in opposition to each other as their leaders compete for dominance through differential access to resources and labor power.

In prestige-goods systems, political power is based on the control and manipulation of exotic, imported preciosities. While elites in all social systems display and maintain their status in part through the control of exotic goods and esoteric knowledge (Frankenstein and Rowlands 1978:75; Helms 1979), in prestige-goods systems all members of the society need these elite symbols for social reproduction (Ekholm 1972; Friedman and Rowlands 1977). Prestige goods in these societies fund social debts, such as bridewealth payments, initiation and funerary fees, and punitive damages, and elites able to control access to these fungible exotic goods gain political power in direct proportion to the demand for them (Frankenstein and Rowlands 1978:76). Because of competition between elites for access to prestige goods, these systems tend to be highly unstable (Friedman and Rowlands 1977:228). It seems common for prestige-goods systems to centralize and collapse repeatedly, and hence, they provide a uniquely valuable social form for examining these processes (Peregrine 1992). In addition, I have argued (1991, 1995, 1996) that prestige-goods systems are a special case world-system, and are particularly valuable for examining the rise and demise of world-systems.

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4

The Changing Structure of Macroregional Mesoamerica: The Classic-Postclassic Transition in the Valley of Oaxaca

Gary M. Feinman

Introduction

In the 24 years following Wallerstein's publication of *The Modern World-System I* (1974), two key issues have stirred persistent debate among researchers who have endeavored to apply (or critique the application of) this perspective to precapitalist (and particularly archaeologically known) societies. The first debate concerns the preferred unit of analysis, while the second focuses on the systemic properties of nonutilitarian or prestige goods.

The question of analytical units stems directly from Wallerstein's proposition of world-systems theory in direct opposition to earlier developmentalist or evolutionary approaches (cf. Sanderson 1991), which tended to concentrate on regions. Most subsequent world-systems theorists have adhered to Wallerstein's stance on this matter. For example, Chase-Dunn and Hall (1993:851) recently asserted that "the fundamental unit of social change is the world system, not the society."

Since 1984 (Blanton and Feinman 1984), I have repeatedly called for archaeologists, most of whom have long been steeped in neo-evolutionary thought, to give more serious attention to the macroscale and the world-systems perspective. Although I recognize the importance of this broader spatial approach, I question whether it really makes sense to decide unilaterally which analytical or organizational scale is privileged. For example, in opposition to Chase-Dunn and Hall (1993), Sanderson (1991:187) asserts that in most (if not all) preindustrial contexts, processes internal to a society (such as population pressure) serve as the principal stimuli for change. Yet is not this question at least partially an empirical issue, depending on context and problem? In another historical science, biological evolution, grand theorists like Ernst Mayr (1982) have concluded that research

should be conducted, and theories constructed, at various scales simultaneously (in that case from chemicals to ecosystems). I suggest that study of long-term social transitions requires multiscalar theories (from households through macroregions), and there is no reason to indelibly tar all regional-scale analysis with the prior sins (mechanistic, reductionist, and unilineal tendencies) of many neo-evolutionary approaches (e.g., Blanton et al. 1993; Blanton et al. 1996; Feinman and Neitzel 1984).

Blanket pronouncements concerning the priority of the macroscale also run counter to the intuitive biases of most archaeologists, who tend to focus more locally. For example, I am sure that David Webster (1994:419) spoke for many of my colleagues when he commented "that the most significant of the forces that stimulate the emergence of cultural complexity in preindustrial societies and thereafter maintain and reshape it are usually quite localized." Although I also find Webster's (as well as Sanderson's aforementioned) position to be overstated, equally stark propositions in the opposite direction do not serve to encourage the serious consideration of macroscale processes in archaeology.

The debate over the role of prestige goods has been, if anything, more rancorous and central to the development of preindustrial world-systems approaches. Wallerstein flatly dismissed the role of nonutilitarian goods in the creation of systemically important interregional ties. His rigid stance has been critiqued by Schneider (1977), Abu-Lughod (1989, 1993), and many others. In accord with this polarity, most archaeologists tend to line up on one side of this issue or the other. That is, they either view the role of preciosities as generally (that is cross-culturally) significant or not. Relatively little attention has been given to diachronic changes in the nature of the linkages in (or what Hall and Chase-Dunn [1993:127] have described as the "systemic logic" of) particular macroregions over time. Yet is it not most likely that the answer again lies at neither extreme position, and that the systemic significance of prestige or wealth exchange shifts with changes in the structure of world-systems and their component societal or regional pieces?

The Classic-Postclassic Transition in Ancient Oaxaca

With these debates concerning analytical units and preciosities in mind, let us move to a discussion of later pre-Hispanic Mesoamerica. The point of reference is the Valley of Oaxaca in Mexico's Southern Highlands, a large highland valley situated in a mosaic of surrounding mountain, valley, and coastal regions that comprise western Mesoamerica (Figure 4.1). The temporal focus is the so-called Classic-Postclassic transition, which in the western half of Mesoamerica occurred roughly between A.D. 700-900. The Classic period (A.D. 200-800) was the initial

era of widespread urbanization in western Mesoamerica, and was dominated by large nucleated centers, like Monte Albán in the Valley of Oaxaca and Teotihuacan in the Basin of Mexico. The Postclassic era (A.D. 900-1520) was a time of mostly smaller centers and polities, although it culminated with the rapid rise of Tenochtitlan and the tribute domain of the Aztec during the last century prior to Spanish conquest.

In the Valley of Oaxaca, scholars have long noted the Classic-Postclassic transition as an episode of dramatic change marked by the curtailment of public building at (and the partial abandonment of) Monte Albán, the increasing importance of other valley centers (such as Mitla), and recognized shifts in the spatial arrangement of large settlements, monumental architectural styles, and ceramic forms. Interestingly, prior explanations for this transition mirror the broader history of archaeological interpretations or paradigmatic frameworks. Prior to 1970, my intellectual grandfathers, Alfonso Caso, Ignacio Bernal (1966), and John Paddock (1966, 1983), emphasized the historic presence of Mixtec speakers in sixteenth-century Oaxaca and viewed the Classic-Postclassic transition as the consequence of an invasion or population replacement in which the region's Zapotec inhabitants were subsumed by Mixtecs. Although elements of this interpretation, such as the historic presence of some Mixtecs in the region at conquest, cannot be discounted, there seems little question that these early interpretations (like the culture history paradigm more generally) placed too much weight on ethnicity as the principal basis for societal and artifactual change. More recent generations of scholars in the region (Flannery and Marcus 1983a; Spores and Flannery 1983) have recognized problems with this early view. Many architectural and artifactual elements in the valley show strong continuities between the Classic and Postclassic periods, and the material culture of the Postclassic Valley of Oaxaca hardly duplicates that found in the neighboring Mixtec heartland. Equally important, both at Spanish contact and in this century, more people in the valley speak and define themselves as Zapotecs than Mixtecs.

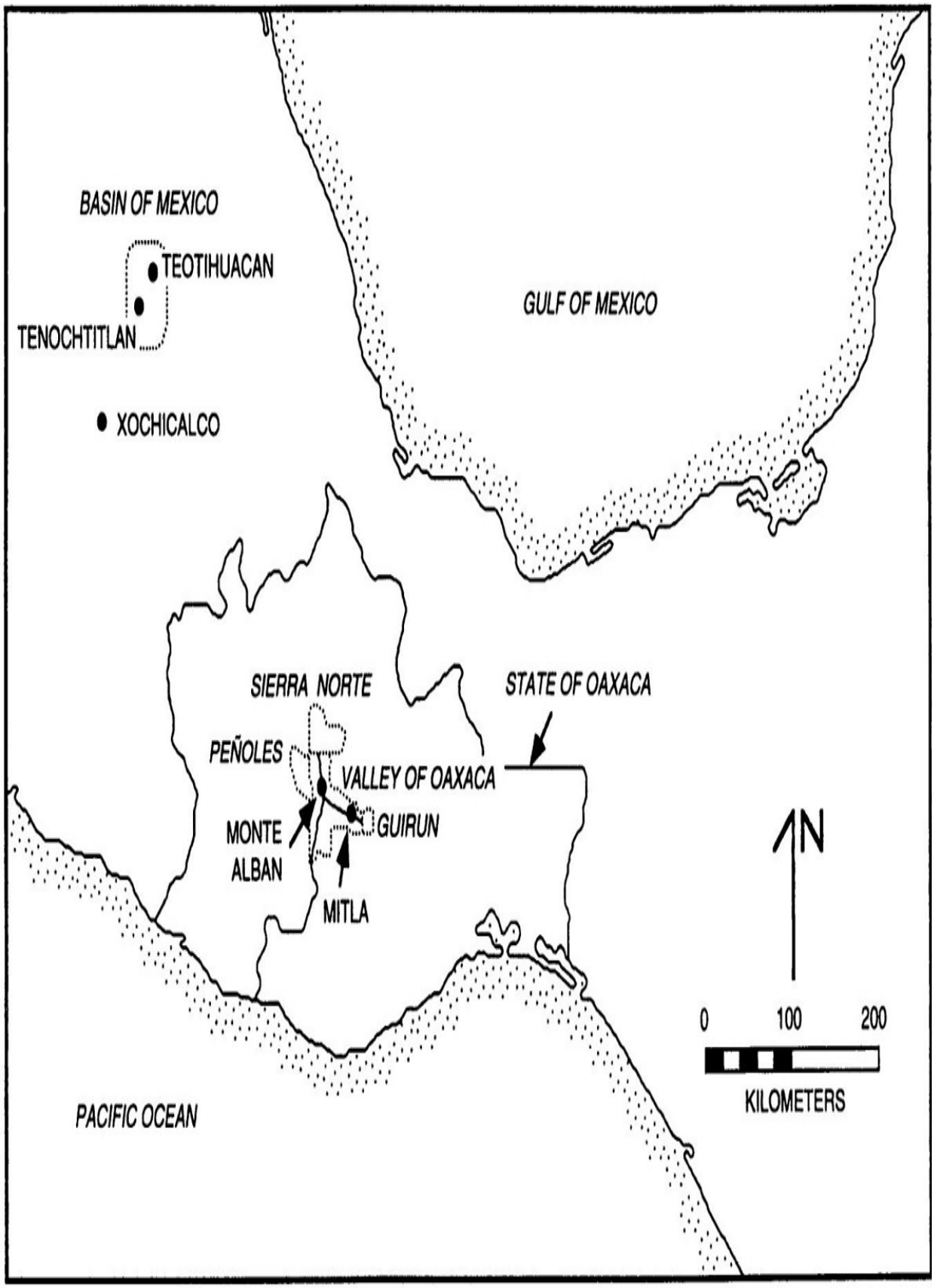
BASIN OF MEXICO
TEOTIHUACAN
TENOCHTITLAN
XOCHICALCO
GULF OF MEXICO
SIERRA NORTE
STATE OF OAXACA
PEÑOLES
VALLEY OF OAXACA
MONTE ALBAN
GUIRUN
MITLA
N
0
100
200
KILOMETERS
PACIFIC OCEAN

Figure 4.1. Map of Mesoamerica showing principal sites and places mentioned in text.

By 1970, the consensual framework for the interpretation of the Classic-Postclassic transition shifted from broad-scale, ethnicity-driven models of culture history to the more regionally focused, socioeconomic perspective of neo-evolutionary processualism (Finsten 1983; Flannery and Marcus 1983b; Marcus 1989). Completion of the full-coverage archaeological settlement survey of the region (Blanton et al. 1982; Kowalewski et al. 1989) revealed that the collapse of Classic period Monte Albán led to a regional "balkanization" in which the valley's population was subdivided into more than a dozen clusters, several of which were separated by sparsely inhabited buffer zones. Each of the population clusters surrounded a head town. The largest of these were more equivalent in size and architectural monumentality than were centers during the prior Classic period, dominated by the primate capital Monte Albán.

For the Valley of Oaxaca, these processual, regionally focused models of the Classic-Postclassic transition emphasize collapse and the resultant competition between the smaller polities that emerged. In the competitive political landscape of the Postclassic, no one center was capable of dominating either information technologies (writing) or economic relations. Genealogical registers, which trace the ancestry of specific elites, have been found at several sites. These records of lineal kin ties, which have been recovered in tombs, were intended to be read by a small audience. In this regard, they differ markedly from the public monuments of the earlier Classic period (Marcus 1989:205, 1992:283-285). More intensive craft production in the region and increased volumes of obsidian artifacts have been interpreted to reflect heightened economic activity or commercialization in the absence of strong central political control during the Postclassic period (Kowalewski et al. 1983).

Looking Beyond the Region

Although many elements of the processual interpretation still appear salient, a regionally focused explanation cannot account for other key aspects of the Classic-Postclassic transition in Oaxaca. For example, the increased quantities of obsidian must reflect broader-scale processes, as obsidian cannot be mined anywhere in the state of Oaxaca. General artifactual diversity was also greater during the Postclassic than earlier periods (Kowalewski and Finsten 1983:419), including a wider assortment of highly decorated ceramic varieties, such as

polychromes and the incredible cache of wealth and ritual items that Alfonso Caso unearthed in Tomb 7. Despite repeated excavation attempts, no Classic period tomb at Monte Albán has even come close to that concentration of wealth.

Balkanization alone also cannot account for the sizeable buildup in the numbers of settlements and overall population expansion that occurred during the Postclassic period in three mountain areas that abut the valley. To the north, Drennan (1989) found a doubling of sites and population between the Late Classic and Late Postclassic. In the Peñoles area to the north and northwest of the valley, Finsten (1996) reports a doubling of population in the Postclassic. To the east, in the Guirún area (Feinman and Nicholas 1996), the number of sites increased by more than fourfold between the Late Classic and Postclassic periods, while the population more than doubled. In each of these mountain zones, occupation was denser and more continuous than ever before. In fact, the tempo of demographic growth between the Classic and Late Postclassic periods was more rapid in these mountain zones than it was in the Valley of Oaxaca. Clearly, in the Postclassic, the physiographic limits of the Valley of Oaxaca were less of a habitational boundary than ever before.

Yet the Classic-Postclassic transition was not unique to Oaxaca. Across Mesoamerica, great political and cultural centers declined, while smaller polities vied to take their places. As with the genealogical registers in Oaxaca, greater emphasis at many Mesoamerican sites was placed on the legitimation of specific lines of dynastic succession (Blanton et al. 1992; Diehl and Berlo 1989; Marcus 1992:229-249). Likewise, the Classic-Postclassic increase in the importance of wealth exchange has been noted throughout Mesoamerica (Kepecs et al. 1994; Sabloff and Rathje 1975; Smith 1988; Smith and Heath-Smith 1980).

In Postclassic Mesoamerica (especially prior to the rise of the Aztecs in the last pre-Hispanic centuries), prestige wealth was a key basis of political power. The development of core-periphery hierarchies at the macroscale (and often even the regional scale, as we saw for balkanized Oaxaca) was minimized during much of the Postclassic. Yet interpenetrating accumulation (Gills and Frank 1991:84-85), a key to world system structure, was clearly at work as elites participated in each others' systems of labor exploitation across political boundaries through the manipulation of prestige exchanges (Kepecs et al. 1994). The ideology of this period, which crossed regional boundaries as an eclectic "international style," (Blanton et al. 1996; Smith and Heath-Smith 1982) also fostered elaborate ornamentation and prestige wealth in a manner not present in the Mesoamerican highlands during the earlier Classic period (Baird 1989; Nagao 1989; Pasztory 1988:71). Many new varieties of prestige wealth were disseminated widely across

the Mesoamerican world at this time, including elaborate metal bells and ornaments, fine paste pottery, and the polychrome ceramic tradition.

Some world-systems theorists might be content if I ended this paper now. After all, what have I argued to this point? The Classic-Postclassic transition in Oaxaca was part of broader macroscale processes that were initiated by the fall of major Classic period urban centers such as Teotihuacan, Monte Albán, and the cities of the Maya Petén between A.D. 700-900. These changes ushered in a more fragmented, pan-regional, political landscape that was interconnected primarily through the exchange of prestige goods. In this Postclassic landscape, physiographic boundaries were more open, core-periphery hierarchies were minimized, and prestige goods underlaid a key basis of local power through the role in their attraction and manipulation of factional labor. Prestige goods would be seen as having systemic-defining properties, which they did at this time, and the macroscale could be proclaimed predominant.

A Multiscalar Perspective

Many of these macroscale observations also remain salient. Yet again, the macroscale approach leaves important aspects of the Oaxaca Classic-Postclassic transition unexplained. For example, major differences in Classic and Postclassic period public architecture exist. Classic period sites feature focal central plazas that often are fairly large. The Main Plaza at Monte Albán is a primary example; there is no question regarding the location of the central precinct at the site. In contrast, Postclassic sites like Mitla often have multiple plazas and architectural complexes of roughly equal size and importance. Postclassic plazas tend to be more closed, smaller, and, sometimes, residential in nature. In addition, how would a purely macroscale perspective account for the unsurpassed accumulation of wealth in Postclassic Tomb 7? The mere importance of Postclassic prestige goods does not explain this accumulation, unequaled in any prior era, especially since no Postclassic Oaxaca settlement equaled the size or monumentality of Classic period Monte Albán,

From a simple unilinear evolutionary perspective, one might have expected to find the greatest concentrations of burial wealth during the Classic period when Monte Albán was clearly the largest and most monumental center in the region. Postclassic Oaxaca centers were more even in size and smaller than Classic period Monte Albán. Likewise, from a purely macroscale perspective, one might have expected select Classic period interments to contain the most elaborate offerings, since the interregional influence and power of Monte Albán and the valley of Oaxaca were seemingly greater at that time. Yet although many Classic period tombs have been excavated, the greatest accumulation of pre-Hispanic

Oaxacan grave wealth is Postclassic in date. Sampling issues and "negative evidence" always could be raised to "account for" Tomb 7. Yet differences in the distribution of grave wealth, when considered with the aforementioned architectural distinctions for the Classic and Postclassic periods, seem to signal possible key differences in the way in which Valley of Oaxaca society was organized during these two phases. Interpersonal networks and the exchange of wealth were more critical in the Postclassic, while monumental architecture and the activities associated with it seem to have had a larger role in Classic period society (Blanton et al. 1996).

A further issue concerns Monte Albán's interregional connections during the Classic period. Although the extraregional flows of prestige wealth were less than later, and the physiographic region of the Valley of Oaxaca did more or less define a Classic period settlement frontier, it would be inaccurate to assume that macroscale processes were nonexistent or unimportant during the Classic. For example, Marcus (1983) suggests that a political meeting of significance between Teotihuacan and Monte Albán was commemorated at Monte Albán on the Classic period Lápida de Bazan and on carved stones that were part of the South Platform at the south end of the Main Plaza (Marcus 1983). Byland and Pohl (1994) argue that alliances with Monte Albán helped to sustain population centers in the Mixteca Alta that collapsed after Monte Albán's demise. Space does not permit a full consideration here, but many more evidences of apparently important interregional connections could be amassed for the Classic period. The nature, however, of those extraregional linkages appears to have been rather different during these two phases.

Where does this leave us? First, I suggest that a Mesoamerican world system existed in the Classic period, but (at least in western Mesoamerica) it was a world system with a somewhat different "system logic" and was based less directly on wealth exchange than was the later Postclassic world. This implies that even for one world system, ancient Mesoamerica, a blanket statement cannot be made regarding the significance of prestige exchange. The role of such exchanges appears to have varied in systemic importance over time. In a cross-cultural comparison, even greater variation might be expected. Second, I would argue that the differences in public architecture and tomb accumulation underlie key distinctions in the nature of rulership between Classic and Postclassic Oaxaca. Classic period rule was focused on the corporate integration of societal segments through integrative rituals carried out in monumental settings and central plazas that were replicated across the region. Rule was relatively anonymous, perhaps resting in certain offices, such as the heads of certain corporate groups. In contrast, Postclassic rule in Oaxaca appears to have been more closely linked to

specific individuals who lived in elaborate residential complexes and derived their importance through their network of allies and familial ties. The genealogical registers of this period establish legitimacy through lineal descent and patrimonial rhetoric. The control of wealth was tied to the control of factions, and together these form key bases of power. Yet the significance of factions is evidenced in the multifocal layout of most Postclassic centers. Tomb 7 with its massive concentration of loot exemplifies the importance of prestige wealth and elaborate personal adornment at this time.

By now it may be evident that the Classic-Postclassic differences in Oaxaca correspond to a degree with the broader pan-Mesoamerican patterns. But if one looks beyond Oaxaca, the parallels weaken somewhat. Although the Postclassic centers of Xochicalco (in Morelos) and Chichén Itzá (in Yucatán) participated in the Postclassic world of prestige exchanges, they had public architectural complexes that belie a more corporate orientation than is found at Postclassic Oaxacan sites. Clearly then, if we are to understand major historical transitions (like the Classic-Postclassic transition in Oaxaca and Mesoamerica), we cannot design our research at only one scale, nor should we expect theories designed for a single scale to provide adequate or complete answers. A more multiscalar approach that bootstraps, rather than juxtaposes, theories from different spatial vantages seems requisite.

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5

Negotiated Peripherality in Iron Age Greece: Accepting and Resisting the East

Ian Morris

Introduction

In this paper, I argue that Nick Kardulias' concept (this volume) of "negotiated peripherality" provides a valuable link between the high-level generalizations of world-systems theory and the lived experiences of real people in the past. Peripherality is not an automatic and passive status; even in the face of neighbors with overwhelming military or economic superiority, those on the margins must find ways to make sense of things which they perceive as coming from outside. Attempts to do so involve not only tensions and debates with outsiders but also disagreements within the community, and even over what the boundaries around the community should be (see Appadurai 1986; Curtin 1984). Focusing on the specifics of the local archaeological and historical context, and thereby on how particular groups came to terms with larger economic and military systems, is not simply a way to fill in the details which the grand theorists inevitably gloss over. Rather, it is fundamental to any serious attempt to understand the expansion and contraction of world-systems. Core-periphery relations are reproduced through time and space by knowledgeable actors. As in any kind of sociological analysis, it is the decisions these actors make (along with the unintended consequences of their decisions), which are in turn based on their understandings of the structural constraints which operate on them, which determine just how any system or society develops (Giddens 1979; Sahlins 1981).

I explore the concept of negotiated peripherality through a case study of the central part of Greece in the tenth and ninth centuries B.C. (Figure 5.1). Around 1000 B.C., at the beginning of this period, there was very little interaction between Greece and the wider Mediterranean world; by 800, that had changed completely. Phoenician traders must by then have been a common sight in Greek waters, and Greeks were themselves probably sailing far to the East and West. It is hard to imagine any society in which there could be perfect consensus over

external influences as strong and as rapidly changing as those affecting the Iron Age Aegean. In the seventh and sixth centuries, when we have literary evidence, upper-class poetry reveals profound ambiguity about the East, with some aristocrats rushing to ape oriental luxury, and others rejecting it as a source of corruption and effeminacy. For both camps, the East was deeply implicated in contemporary political conflicts (Kurke 1992; I. Morris 1996). I argue that as early as the tenth and ninth centuries, some people were more eager than others to embrace the East; and, I suggest, attitudes toward the East had massive social, cultural, and political consequences. To tell the story of Greek-Near Eastern interactions solely in terms of the abstract logic of a world-system would be to miss at least half their point.

MACEDONIA
Thasos
CHALCIDICE
Skyros
Orchomenos
Chalcis
Lefkandi
Andikyra
ACHAEA
Thebes
Athens
CYCLADIC
ISLANDS
Argos
Tiryns
Thorikos
Asine
Koukounaries
Naxos
Tsikalario
Cos
Nichoria
CRETE
Knossos
Kommos
0
200
KILOMETERS

Figure 5.1. Map of the Aegean region showing locations mentioned in the text. The hatched region represents the material culture area which I define as central Greece.

I begin by briefly reviewing the broad pattern of developments across the whole Mediterranean during the millennium beginning around 1200 B.C. which have led Gills and Frank (1992; Frank 1993) and Sherratt and Sherratt (1991; 1993) to suggest that the best way to understand this history is in terms of the cycles of a contracting and expanding world system based on the Near East. I then examine some of the strengths and weaknesses of their approach to the Mediterranean, before turning to my case study from Iron Age Greece.

The Ancient Mediterranean World

Around 1200 B.C., the East Mediterranean world was shaken to its very foundations. From northern Mesopotamia to Greece, the great palaces which had dominated life for centuries were overthrown and burned. Egypt only narrowly escaped the same fate, when Ramses III defeated invading forces of "Sea Peoples," somewhere between 1205 and 1180 B.C. The international correspondence between kings and long-distance exchange of luxurious gifts and bulk commodities, which had characterized these Late Bronze Age societies, began to fade away. The most recent survey of the period describes this as "the worst disaster in ancient history, even more calamitous than the collapse of the western Roman empire" (Drews 1993:3).

This is perhaps an overstatement (see Ward and Joukowsky 1992), but the twelfth and eleventh centuries do seem to have been a time of steadily shrinking horizons. After an imperialistic episode under Tiglath-Pileser I (1114-1076 B.C.), Assyrian power declined throughout the tenth century. By 1000 B.C., western Asia had become something of a power vacuum, and long-distance trade sank to very low levels. There is scarcely any firm evidence for contacts between the Levant and the Aegean by 1000; on Cyprus, few Phoenician or Greek objects are found (Bikai 1987; Coldstream 1988). As late as the 1080s the Egyptian *Story of Wenamun* represents Sidon and Byblos as powerful trading cities, but by 1050 the Philistines had defeated the Israelites at Ebenezer (1 Samuel 4:1-10), and for the next three generations created havoc along the coast between Gaza and Mt. Carmel. The Third Intermediate Period in Egypt, usually defined as beginning around 1100, was also characterized by chronic political instability (Kitchen 1986). We have to travel as far east as Babylonia to find a region in which

continuities across the twelfth century seem to outweigh disjunctions (Zettler 1992). To the West, we see a sharp contraction in the geographical area which seems to be connected to the East Mediterranean palatial economies. Peroni (1979) has suggested that before 1200 we can draw a boundary in Italy between "Mediterranean" and "European" cultures in the Po valley; after 1200, it retreats to the north coast of Sicily.

This process of contraction and decline was reversed in the middle of the tenth century. An Assyrian recovery began under Ashur-dan II (934-912 B.C.), and even earlier than this the Israelites under David had broken Philistine power. Tyre rapidly emerged as a trading center. Its king Hiram I (969-936 B.C.) made commercial alliances with Solomon of Israel, which involved trading to Ophir (1 Kings 9:10), probably far down the Red Sea coast (Briquel-Chatonnet 1992:40-47, 271-87). Phoenicians probably began sailing as far west as Sardinia before 900, although actual colonization only came later (Aubet 1993:172-184; Bunnens 1979; Negbi 1992; Niemeyer 1982, 1990, 1994). In the ninth century, Greeks were also traveling widely. The old theory that Al Mina on the north Syrian coast was a Greek colony is open to serious question (Bonatz 1993; Perreault 1993), but even if most of its residents were Syrians, the concentrations of Greek pottery found there from c. 825 onward attest to significant long-distance contacts.

The revival of long-distance contact during the ninth century was followed by a veritable explosion in the eighth. Greek pottery appears quite regularly in the cemeteries of eighth-century Campania, Latium, and Etruria, and by 750 the first of tens of thousands of Greeks had begun to move to new cities in the west—first along the coasts of eastern Sicily and southern Italy, later in southern France, eastern Spain, and North Africa (Ridgway 1992). At roughly the same time, Phoenicians were settling western Sicily and Carthage, later expanding into the Balearic islands and southern Spain (Aubet 1993; Lancel 1995:78-109). In most cases, the colonies had far-reaching effects on the indigenous populations. Back in the East Mediterranean, we see rapid population growth, increasing political centralization, more intense warfare, and changes in settlement patterns and agriculture. At the end of the eighth century, Nubian conquerors finally restored some degree of unity in Egypt, and after a period of civil wars and upheavals known as "the interval" (782-745 B.C.), Tiglath-Pileser III restored the Assyrian kingdom. Grayson (1991:161) suggests that it is only after the 740s that we can really speak of an Assyrian "empire."

The eighth century was a major historical turning point for the whole Mediterranean world, and the new patterns established then—of small but vigorous city-states in Greece and Italy, and steadily growing imperial powers in western Asia—became stronger over the next two centuries. The Cimmerian

invasions of the seventh century and the overthrow of the Assyrians in 612 were little more than temporary setbacks in the escalation of political centralization, and within sixty years a new and far more effective Persian empire had taken shape. Its first king, Cyrus, waged wars from the east coast of the Aegean to Afghanistan. In 525, Cambyses overran Egypt, and in 514 Darius I was campaigning far to the north of the Danube. Darius thoroughly reorganized the tribute system of the Persian empire (Cook 1983:67-90). A Greek alliance abruptly stopped the Persians' westward expansion in 480-479, but by then the political and military integration of the East Mediterranean had once again reached a level comparable with, or even higher than, that of the thirteenth century. The Athenians struggled to drive the Persians out of Egypt in the 450s, and in 415 made a serious attempt to conquer Sicily—according to Thucydides (6.15), ultimately with a view to attacking Carthage. With the defeat of the Athenians in 404, Persian influence over the Aegean was renewed, only to be overthrown in the 330s when Alexander III of Macedon (formerly very much a peripheral zone in Mediterranean events) overran the whole Persian empire.

By then, the Mediterranean was arguably more integrated than ever before. Romans and Carthaginians were carving out empires of their own, and in the far west, there were rapid movements toward state-formation in southeast Spain (Fernández Castro 1995:171-235; Ruiz, forthcoming; Santos Velasco, forthcoming). The connections between these predatory states are well documented (e.g., Champion et al. 1984:240-66). Between 264 and 201, the Romans destroyed Carthaginian power, and in an extraordinary outburst of military energy, went on to consume the whole Mediterranean basin, from Spain to Syria, with violence, genocide, and mass enslavements. According to Polybius, a Greek writing in Rome around 150 B.C., "the Romans succeeded in less than fifty-three years [220-167 B.C.] in bringing under their rule almost the whole of the inhabited world, an achievement which is quite without parallel in human history" (1.1). Polybius continued:

> Now in earlier times the world's history had consisted, so to speak, of a series of unrelated episodes, the origins and results of each being as widely separated as their localities, but from this point onwards history becomes an organic whole: the affairs of Italy and of Africa are connected with those of Asia and of Greece, and all events bear a relationship and contribute to a single end (Polybius 1.3. Translations by Scott-Kilvert [1979]).

The Problem

Does it make sense to see this millennium-long history in terms of the contraction and then renewed expansion of a world system based in western Asia? Some archaeologists have no doubt that much of what happened in the first millennium B.C. can be explained through the expansion of such an economic system (e.g., Brun 1987, 1994; Collis 1984; Cunliffe 1988; Kristiansen 1994; Sherratt and Sherratt 1993). In the most ambitious account, Frank (1993) has placed these accounts within a 5,000-year-long history of a single world-system. His discussion of this period is not without problems: he would see the years 1000-800 B.C. as what he calls an "A-phase" of expansion, but then argues that 800-550 was a "B-phase" of contraction, before renewed expansion between 550 and 450, contraction between 450 and 350, expansion between 350 and 250/200, and (in direct contradiction of Polybius, whom Frank never mentions) contraction once again between 250/200 and 100/50 B.C. (Frank 1993; Gills and Frank 1992).

Frank concedes that there are "difficulties for the exploration of the extent of the system and the dating of its cyclical phases" (1993:399) between 800 and 550. Four of the respondents to that *Current Anthropology* paper (Barceló, Friedman, Kristiansen, and Muhly [pp. 406-407, 409, 415, 418]) charge that Frank misunderstands these centuries, while a fifth (Knapp [p. 413]) suggests that he consistently glosses over the Mediterranean evidence. There seems to be general agreement that Frank's A/B cycles are misleading for the first millennium, and that we might do better to speak of a steady increase in integration from the tenth century B.C. through the second century A.D., with certain periods within this long cycle being marked by especially rapid growth.

But Frank's general point—that conventional ways of writing Near Eastern, Greek, Roman, and Carthaginian history are too narrow, and that we need to paint our pictures on a broader, Mediterranean-wide canvas—is commanding increasing support. The problem is that there is little agreement on how to do this. Dietler (forthcoming), for instance, is sharply critical of Brun's work on the spread of elite drinking practices in the West Mediterranean as an index of cross-cultural transmission of political institutions, arguing that when we confront the details of the archaeological record, we see that these rituals meant radically different things in different places. Similarly, Arafat and Morgan (1994) have suggested that in the process of transmission from the Aegean to temperate Europe via Etruria, a range of Greek customs and artifacts were reinterpreted in their new contexts to serve new ends. Dietler and Arafat and Morgan fully agree on the need for a Mediterranean perspective and an explicit focus on cross-cultural contacts, but want to emphasize the locality as well as, or even more than, macroeconomic trends.

These disagreements are bound up in larger theoretical questions. In the last thirty years, there has been a major turn in the social sciences and humanities away from cross-cultural generalizations and comparisons and toward richly contextualized, particularistic studies of individual experience and local culture (e.g., Geertz 1973, 1983; Hunt 1989; Lyotard 1984; Ortner 1984). Debates between those who emphasize specificity, human agency, performance, and context and those who emphasize broad patterns have tended to become polarized, generating more heat than light. Frank, for instance, explains that

> objections may focus on my failure to pursue related inquiries into more conventional questions such as ecology, technology, state formation, class structure, language, race, culture, and religion. At a time of nearly worldwide assertions of "ethnicity" and diversity, a statement of world-system unity in diversity may also seem to committed activists "politically incorrect." Social theorists may find especially lacking a theoretical analysis of how the relations among all of these and other factors "make the system tick." I do not deny the importance of these and other intemal/local/national/societal, institutional, cultural, and voluntarist/agency factors. However, those who emphasize them in practice and theory to the exclusion of the real world-systemic and cyclical 'outside' forces beyond them do so at their own peril. This is because the latter determine the opportunities and limitations of the former (Frank 1993:384).

There is less interest in discussion than in insulating one particular viewpoint from criticism. Responding to Arafat and Morgan's (1994) discussion of relationships between Greece, Etruria, and the Hallstatt area, Sherratt laments that

> Those of us who find an internationalist framework useful in understanding the patterns of development in European prehistory and early history can only despair when confronted with the isolationism proclaimed by this article; and prehistorians with a sense of time perspective are embarrassed by the conflation of models appropriate to different millennia (Sherratt 1995:146).

Arafat and Morgan, on the other hand, dismiss "Global explanations of the kind suggested by Sherratt [as] over-simplifications of a very varied and complex phenomenon" (1995:151).

Admittedly, the contexts from which I take these examples—Frank was preparing his article to receive criticism from *Current Anthropology's* commentators, and Sherratt and Arafat and Morgan were engaged in a direct debate in the pages of the *Cambridge Archaeological Journal*—probably made their authors less open to contrary arguments than would normally be the case. But the agonistic spirit—global over-simplification versus embarrassing isolationism—does pervade the literature, causing both camps to close off valuable options. For Frank and Sherratt, one of the most important bodies of work to dismiss is Moses Finley's (1985 [1973]) substantivist interpretation of ancient economics (what Frank [1993:385-86] calls "the 'ancient economy' debate"). Following in a tradition going back to Weber via the work of Karl Polanyi, Finley argued that Greeks and Romans did not think of the market as an independent institution, or of economic relationships as something that could be separated out from other social relationships. He suggested that this was because economic activity was directed mainly toward either subsistence or conspicuous consumption. Frank systematically confuses substantivism with primitivism, the dogma that the market played no significant part in ancient life, and that industrial and trade activities were always on a very small scale. Polanyi gladly accepted that "more than once in the course of human history have markets played a significant part in integrating the economy," and saw fourth-century Athens as one such case; but, he insisted, ancient markets, even in Athens, "never [operated] on a territorial scale, nor with a comprehensiveness even faintly comparable to that of the nineteenth-century West" (1977:43).

For Finley and Polanyi, the whole interest of ancient history lay in the fact that Athens was an advanced, complex economy, allocating part of its resources through a sophisticated system of markets, but one which did not operate along capitalist or socialist lines. Both these historians wanted to make a political point, that if other arrangements were possible in the past, then they were also conceivable for the future (see I. Morris 1994:351-54).

The world-systems model which Frank and the Sherratts adopt is certainly in direct contradiction to many of the conclusions reached by Weber, Polanyi, and Finley; but in looking for excuses to ignore substantivism rather than to engage with it, the theorists deprive themselves of a valuable set of intellectual tools (as well as of the fruits of nuanced and empirically detailed investigations by some of the leading scholars in ancient Mediterranean history). Finley saw that the key questions were about the functions rather than the scale of exchange, and his concern for how exactly we would define "a large unified economic space" in antiquity (1985:181-83) would add an important dimension to the world-systems

theorists' work. Like Wallerstein (1974:16), Finley suggested that pre-modern "world economies" were actually "world empires."

Within classical scholarship, the theoretical issues are rather different, but often lead to similar results. Rather than world-systems theorists defending the grand sweep against more particularistic approaches, the last ten years have seen scholars rejecting conventional models which treated the Near East and Graeco-Roman civilization in semi-isolation. The intense controversy generated by the first volume of Martin Bernal's *Black Athena* (1987) has been particularly influential in this regard (see Lefkowitz and Rogers 1996; Peradotto and Levine 1990).

Bernal argued that since the late eighteenth century, European and American scholars had tried to create a charter myth legitimizing their image of a specifically western historical trajectory by tracing the origins of Europeanness back to ancient Greece, and insisting that Greek culture took shape completely without influence from the Near East (indeed, was the antithesis of everything "oriental"). Bernal suggested that racist scholars had deliberately ignored direct evidence for Greek interaction with and borrowing from Egypt and the Near East, and had artificially torn ancient Greece out of its true historical context. Instead of insisting on working only with Greek evidence, and explaining it only in terms of events in Greece, Bernal urged that ancient historians see the Greeks as part of a broader East Mediterranean civilization. These arguments struck a chord with classicists who were already interested in Greek-Levantine relationships in the early first millennium (e.g., Burkert 1992 [1984]; Kopcke and Tokumaru 1992; S. P. Morris 1992).

Like Frank, these scholars often present their work as being an alternative rather than a compliment to analysis in terms of the agendas of individuals and groups within the Aegean periphery. Burkert (1992:7), for example, concedes that "the mere fact of borrowing [practices from the Near East] should only provide a starting point for closer interpretation, that the form of selection and adaptation, of reworking and refitting to a new system is revealing and interesting in each case." He goes on, though: "the 'creative transformation' by the Greeks, however important, should not obscure the sheer fact of borrowing; this would amount to yet another strategy of immunization designed to cloud what is foreign and disquieting." Frank implies that those who emphasize local agency are influenced by their leftist political views; Burkert, that they are closet conservatives.

Kardulias' concept of "negotiated peripherality" is a welcome alternative to this polarization. In the next two sections, I suggest that to concentrate on one particular locality in the ancient Mediterranean without reference to its broader context is a meaningless exercise; but equally, to focus on some abstract concept

of a world-system without examining how its members actually went about constructing it through adapting or resisting large-scale forces explains little (cf. Harvey 1989; Trigger 1991). By looking at the role of negotiated peripherality in the expansion of a world-system, we can retain a sense of human agency, class and gender structures, and local culture, without simply ignoring the very real forces which always prevent people from making their history in the ways of their own choosing.

The Tenth Century B.C. in the Aegean

For much of the second millennium, large parts of the Aegean had been dominated by complex redistributive economies run by administrators working for godlike kings (Dickinson 1994; Laffineur and Niemeyer, eds., 1995; Rehak, ed., 1995). These systems rapidly disappeared after the destructions around 1200, and there were large-scale population movements. Some of these were to areas such as Achaea or the Cycladic islands (see Figure 5.1) which had been relatively empty in the thirteenth century, while others took migrants as far as Cyprus or the Levant. There is also strong evidence for movements into Greece from the Balkans (Rutter 1990). The first generation of the twelfth century was clearly a traumatic time, but it is becoming increasingly clear from excavations at sites like Tiryns and Koukounaries that by about 1150 there had been something of a revival. For local aristocracies, now freed from the burdens of maintaining the palatial elites, this may even have been a golden age (Rutter 1992).

The Mycenaean revival fell apart in a second wave of destructions and migrations around 1100. In the eleventh century population again fell, political centralization disintegrated, and many advanced crafts disappeared. A group of archaeological syntheses in the 1970s concluded that by 1000, the central area of Greece was isolated from contact with the outside world (Desborough 1972; Coldstream 1977; Snodgrass 1971). Snodgrass (1971:228-68, 1980, 1989) argued that central Greeks had learned about ironworking from Cyprus by 1050, and, thrown back on their own resources, created an iron-based economy. Our evidence for the tenth century comes almost entirely from graves. These burials were generally poor and homogeneous, containing just three or four pots and one or two iron objects. There is very little evidence for monuments. I have argued that these graves belong to an elite which represented itself as internally egalitarian, and which dominated a peasantry whose dead were buried less formally, with lower archaeological visibility (I. Morris 1987).

Table 5.1 shows the use of metal grave goods in central Greece between c. 1100 and 750 B.C. Iron suddenly increases in prominence in the Protogeometric period (c. 1025-900) at the expense of other metals; and, as Snodgrass observed,

if we exclude graves which clearly date to the very beginning and very end of Protogeometric, iron is virtually the only metal in use for much of the tenth century. By 900, contact revived, and by 850 bronze grave goods were common, along with actual imports from the Near East.

Tenth-century central Greek graves are very consistent: most belong to adults, and almost all have between one and four pots, and one or two iron objects. Iron even displaced bronze for ornaments. As Table 5.2 shows, at Athens, Lefkandi, and Argos (the three best documented sites) 76-80 percent of the Protogeometric dress pins were made of iron, as compared to much lower figures in Submycenaean (c. 1075-1025) and Early/Middle Geometric (c. 900-750) times (Sub-Protogeometric Lefkandi, roughly 900-825, at which point the cemeteries went out of use, is an exception, with the proportion of dress pins made of iron actually increasing to 88 percent). Fibulas, which are much more difficult to make from iron than from bronze, have a more complex history. At Athens, they are much rarer in Protogeometric graves than are pins, and 68 percent are made from iron; at Argos, none have been found at all. At Lefkandi, though, fibulas are nearly twice as common as pins, and only 15 percent of them are made from iron. In Sub-Protogeometric times, though, Lefkandian fibulas are four times as common as pins, and only 13 percent are iron.

I suggest that the most sensible interpretation of these figures is that in this period, when copper and particularly tin may have been in short supply, pins were more popular grave goods than fibulas at Athens and Argos because they were easier to make from iron. At Athens, where some fibulas continued to be deposited, most of them were made of iron, but the proportion was lower than for pins. At Lefkandi, however, fibulas were more popular than pins across the whole Dark Age, and bronze remained the normal material for fibulas. This may mean that Lefkandi had better access to bronze supplies than did Athens and Argos; but on the other hand, the overall pattern of bronze and iron use at Lefkandi is very similar to the general central Greek pattern, with a sharp increase in iron grave goods in Middle and Late Protogeometric, matched by a sharp fall in bronze use.

***Table 5.1**. Use of metal grave goods in central Greece, c. 1100-750 B.C.*

Period	No. of graves	No. of objects	Iron	Bronze	Gold	Silver
Submycenaean (c. 1100-1025)	376	354	6%	89%	4%	1%
Protogeometric (c. 1025-900)	390	446	41%	48%	11%	0%
Early/Middle Geometric (c. 900-750)	392	778	27%	45%	27%	1%
Total	1158	1578	26%	55%	18%	1%

Source: I. Morris 1998, forthcoming, Table 5.9.

There is no reason to doubt Snodgrass' hypothesis of a sharp decline in trade shortly before 1000, since Greek objects also disappear from the Near East and Phoenician finds stop on Cyprus (see above). But it may be too simplistic to move directly from grave goods to models of the supply of basic raw materials. Continuities in the design of tripod stands from the twelfth century to the eighth show that, even though we have found no actual examples of tripods dating from the eleventh or tenth centuries, there must have been tripods in circulation, used in contexts which did not produce archaeological signatures (Catling 1984; Matthäus 1988). Excavations in settlement sites at Asine (Wells 1983) and Nichoria (McDonald and Rosser 1983) have uncovered fragments of bronze from tenth-century deposits, showing that at least some bronze remained in circulation throughout this period; and chemical analyses of the bronzes deposited in graves at Lefkandi between 1100 and 900 show no real change in tin content, although it was tin which would be hardest to find (I. Morris 1989). Central Greeks had more than one way to respond to the decline in trade after 1050. Euboean and Athenian pottery has been found in some quantity in Chalcidice, which had easy access to

bronze-rich Macedonia. Some archaeologists (e.g., Popham 1994; Snodgrass 1994) argue that there were in fact central Greek colonies in this area in the eleventh and tenth centuries. Papadopoulos (1996) disputes this, but the presence of even a little central Greek pottery in Chalcidice does show that contacts survived across the tenth century. Faced with a decline in the Near Eastern supply of tin and/or copper after 1050, central Greeks could have responded by exploiting the north Aegean; cutting imported artifacts and materials from grave goods was a decision people made, one way in which they negotiated their relationship to the contracting East Mediterranean economic system, not simply a passive reflection of larger forces. The Lefkandians followed some of the developments we see in the rest of central Greece, starting to make most pins from iron, but not others, preferring to use fibulas and to make most of them from bronze.

The replacement of bronze, gold, and ivory by iron in the earlier tenth century can only have had profound symbolic implications for the people of central Greece. It cut the links which tied the present to the past, as well as those tying the locality to the larger East Mediterranean. In Homer's eighth-century epics, and from then on for the rest of antiquity, bronze was the metal of the heroes of the distant past. Throughout 28,000 lines, the heroes only ever use bronze; but in his similes, comparing a situation in the story to the contemporary world, Homer regularly speaks of iron (see Gray 1954; Lorimer 1950:439). This is no trivial consideration: epic poetry was almost certainly *the* major art form in Dark Age Greece, and the language of metals would be widely understood. Using bronze and other imported materials spoke of associations with the wider world and the distant past; using iron, dug from the ground all over Greece, spoke of an enclosed, isolated present. Iron virtually drove out gold, bronze, and other imported materials in the burials of the earlier tenth century (the Middle Protogeometric pottery phase in most parts of central Greece).

At least, this is true of 99 percent of the record. Some 200 tenth-century graves fit this pattern; but a double burial of c. 1000-950 discovered at Lefkandi in 1981 does not. The partially cremated remains of a man had been placed with his weapons in a bronze urn made in Cyprus, which was about 200 years old when buried. Next to him was a female inhumation, adorned in gold jewelry; one piece, the gorget, was Old Babylonian, already a millennium old when buried. Next to her skull was an iron knife with an ivory handle. Over the graves was a pot 1.5 m high, decorated with a Near Eastern tree-of-life motif; and in a second shaft, the skeletons of four horses. The complex was enclosed in an apsidal house 50 m long—ten times the size of any known contemporary house—which was then converted into a giant tumulus, which stood undisturbed till its owner started

bulldozing it to build a summer home in 1981 (Catling and Lemos 1990; Popham et al. 1982a, 1993).

I should emphasize that this burial complex is not a grander version of typical funerals; it completely overturns every norm. Where other burials deny the past and the East, this positively revels in them. Where others are understated, this dominates the landscape. It breaches the limits of time and space as established in tenth-century ritual. Who could do such a thing?

The later literary record provides clues. Around 700, in his poem the *Works and Days*, Hesiod sets out a mythological account of the history of humanity, dividing it into five successive races of gold, silver, bronze, heroes, and iron. "Would that I were not among the men of the fifth race," he says, "but had either been born before or died after. For now is truly a race of iron, and men never rest from labor and sorrow by day, and from perishing by night; and the gods shall give them harsh troubles" (lines 174-178). Elements of this myth probably go back to Bronze Age Near Eastern stories, but the race of heroes is a Greek invention. Zeus created the heroes after he destroyed the bronze race, and the heroes, armed with bronze, destroyed themselves in wars at Thebes and Troy. The heroes, Hesiod tells us, were "a godlike race of heroic men, who are called demi-gods" (lines 159-60). For the next thousand years, semidivine heroes were central to Greek mythology (see Nagy 1979). A race of them had lived in the distant past, but contemporary men, such as the founders of colonies, could show by their deeds that the blood of the heroes ran in their veins, and at their death they could be promoted to heroic status (see Farnell 1921; Nock 1944; Visser 1982). The rites of promotion usually involved elements out of a package of cremation, burial in a metal urn, horse sacrifice, burial of weapons, and a tumulus. In fifth-century tragedy, a character only had to refer to a grave mound to evoke the whole concept of the age of heroes (e.g., Aeschylus, *Libation Bearers*, lines 323-325, 351-353, 686-687, 722-724; cf. Segal 1986:125-129 on Sophocles' manipulation of the symbolism of the empty urn in the *Electra*).

***Table 5.2**. Uses of bronze, iron, and gold for pins and fibulas.*

	N	Iron	Bronze	Gold
Athens				
i) Submycenaean				
Pins	36	6%	94%	0%
Fibulas	50	0%	100%	0%
ii) Protogeometric				
Pins	52	79%	21%	0%
Fibulas	19	68%	32%	0%
iii) Early/Middle Geometric				
Pins	16	44%	56%	0%
Fibulas	8	50%	50%	0%
Lefkandi				
i) Submycenaean				
Pins	9	22%	78%	0%
Fibulas	20	0%	100%	0%
ii) Protogeometric				
Pins	25	80%	20%	0%
Fibulas	40	15%	85%	0%
iii) Sub-Protogeometric				
Pins	16	88%	12%	0%
Fibulas	63	12%	86%	2%
Argos				
i) Submycenaean				
Pins	5	0%	100%	0%
Fibulas	2	0%	100%	0%
ii) Protogeometric				
Pins	17	76%	24%	0%
iii) Early/Middle Geometric				
Pins	71	42%	58%	0%
Fibulas	7	0%	100%	0%

These rites appear for the first time in our archaeological record at Lefkandi. I want to suggest that around 1025-1000 B.C., there was a revolution in ritual and mythology in central Greece. New types of funeral imposed order on the post-Mycenaean chaos, distinguishing an internally homogeneous elite from its dependents. The rites cut the present off from the unwelcome past, and cut the Aegean off from the wider world. The scanty remains of houses and sacrifices to the gods present a similar self-effacing, inward-turned ideology of simplicity (I. Morris 1998, forthcoming: Chs. 5-7). In combination with new rituals, a new system of myth made sense of the Greeks' shrinking horizons. It gave them a usable past. As Hesiod said, this was truly a race of iron. But every so often, a man might once again merge present and past in his own body, rising to the ranks of the heroes. In this way, I would suggest, the central Greeks stabilized a new system of power relations around 1000 B.C., making sense of their new relationship to the great powers of the Near East through turning their backs on it.

The Ninth Century

This system began to break up a century later. Again, while I emphasize the Greek elites' efforts at self-fashioning, we have to set these within a wider network of resistances and forces. As a more favorable climate developed in the Near East (see above), Phoenician trade flourished, and by 900, Near Eastern objects began to turn up all around the Mediterranean, and Greek pottery in the Levant (Aubet 1993; Courbin 1993; Negbi 1992). A late ninth-century temple at Kommos on the south coast of Crete contains a tripillar shrine, unparalleled in the Aegean but with striking similarities in the Levant and the western Phoenician colonies. Since Kommos is directly on one of the most obvious routes from Phoenicia to the central Mediterranean (Negbi 1992:606-609), there is good reason to suppose that this shrine may have been built by or for Phoenician sailors (Shaw 1989). By 850, some archaeologists argue Syrian craftsmen lived at Knossos and on Rhodes (Coldstream 1993). Phoenicians may have been a common sight in the ninth-century Aegean, and in Homer's eighth-century epics they are treated with evident disdain as small-time hucksters, not to be trusted (Winter 1995).

Greece was being drawn into a Mediterranean economic system driven by developments originating in the Levant, but the Greeks' responses to this process were complex. It makes sense to see the proliferation of gold, bronzes, and Near Eastern imports in the graves of the early ninth century at sites such as Athens, Argos, Lefkandi, and Knossos as a response to improvements in supply as Phoenicians returned to the Aegean (Coldstream 1977:55-72). But we should also

note that in the ninth century these exotica are known *only* from graves. None have been found in sanctuaries of the gods or in domestic contexts—in striking contrast to the eighth and seventh centuries, where virtually all Near Eastern imports come from votive offerings to the gods. Second, there is little spatial uniformity in responses. At Lefkandi, the Toumba cemetery began around the great hero burial after 950, and before 900 included not only bronzes but actual Near Eastern imports. These escalated; by 850, some graves held dozens of gold and bronze ornaments, embossed Syrian bowls, and thousands of Egyptian faïence beads (Popham et al. 1980; 1982b; 1989; Popham 1995; Popham and Lemos 1995). But at Chalcis, barely ten miles away, there are no ninth-century exotica (although, admittedly, only a dozen graves are known here [Andreiomenou 1986]). At Athens, bronzes start to appear in some graves before 900, but imported finished objects are rare until 850. Near Eastern materials and imports are even less common at Argos, but occur by 900 in several graves at the much smaller site of Tiryns, just eight kilometers away (I. Morris 1998, forthcoming: Ch. 5).

Coldstream (1977:70-71; echoed in Sherratt and Sherratt 1993:365) suggested that Phoenician traders were attracted in the ninth century to the area around Thorikos, which was a major source of silver. The earliest evidence currently known for the extraction of silver at Thorikos dates around 850 (Bingen 1967; the earliest known Iron Age grave [McDonald 1961] dates around 900). This might account for Athenian involvement with the Phoenicians, and Sherratt and Sherratt further argue that the area around Lefkandi would have been a natural stopping-off point on the Phoenicians' way further up the east coast of Greece, perhaps to the gold mines of Thasos (although there is still no direct evidence from Thasos for Phoenician presence). This is a plausible scenario, and Athenians and Euboeans may well have had better access to Phoenician goods than other Greeks, but it does not provide a *sufficient* explanation for the variations in deposition. There is no obvious geographical reason for Tiryns to be better supplied than Argos or Athens, or for the users of the Toumba cemetery at Lefkandi to have been so much more enthusiastic about the new possibilities than anyone else.

I suggest that there was disagreement and competition both within and between communities over what should be done about the new availability of exotica. In the tenth century, these rare objects had evoked a parallel universe of heroes; after 900, they were much easier to get hold of. Some people, like the buriers in the Toumba cemetery at Lefkandi, embraced the new; others, like most buriers at Athens, were hesitant. Rushing to use oriental objects meant abandoning or at least revising the tenth-century elite ideology of an inward-turned, homogeneous

ruling class which was a race of iron. Some members of the elite tried to hold onto this; others turned away from it.

The reasons why different individuals and groups reacted as they did are lost forever, but the overall effect is clear enough. There was a general loosening of the rigid past/present and Greek/Eastern distinctions. Buriers at several sites experimented with objects which evoked the past: a Mycenaean pot on the cover slabs of Grotta grave 5 at Naxos (Lambrinboudakis 1988), another in Electran Gate grave 2 at Thebes (Keramopoullos 1917:25), and three in Serraglio grave 10 on Cos (Morricone 1978). Mycenaean gold jewelry was buried with a warrior on the island of Skyros (Papadimitriou 1936), and Mycenaean carved gems in Tiryns grave 1972/6 (Gercke and Naumann 1974). Sabrie grave B on Cos held a bronze javelin head, and graves at Orchomenos and near Andikyra have produced bronze swords (Sotiriades 1904:39-40, 1907; Snodgrass 1971:241). The tumulus, a key element at Lefkandi and in later heroizing funerary imagery, also returns in the ninth century. On Naxos, the Grotta graves (which also paralleled Lefkandi in other ways) were marked by a mound which was respected until Roman times, and at Tsikalario in the center of the island a series of rich cremations under large mounds began around 850/825 (Coldstream 1977:91-92). Perhaps most intriguing of all is a now famous clay model of a centaur, a mythical half-man and half-horse beast, found at Lefkandi, with the head in Toumba grave 1 and the rest of the body in grave 3 (Popham et al. 1980:168-70). One knee of the model has a carefully marked wound; seven centuries later, Apollodorus (2.85) was to describe how Chiron, the centaur who educated the hero Achilles, had just such a knee wound. The argument for long-standing continuities in myth is strong here; so, too, the argument for a major reconceptualization of ideas about the past and the mythical world in the years around 900 B.C.

By 850, grave goods at many sites were rich by Greek standards, with gold, bronze, ivory, and even amber. But between 825 and 800 this trend was reversed, and by the early eighth century graves are generally poorer and simpler than at any time since the tenth century, although bronze was not abandoned (see Table 5.1; Coldstream 1977:73-106). This decline in grave goods was definitely not a passive response to supply. By 825, Greek pottery is abundant at Al Mina on the Syrian coast. Whether Greek traders settled here or a Syrian community had become intensively involved with the Aegean (see above), Greek horizons were widening, not contracting. Greek objects also start to appear in quantity in Italy and Sicily in these years (D'Agostino and Ridgway, eds., 1994; Ridgway 1992), although there is currently heated debate over the absolute chronology of the earliest pendant semi-circle skyphoi in the West (Kearlsey 1989; Popham and Lemos 1992).

Whatever the outcome of these arguments, there is absolutely no doubt that well before 750, substantial numbers of Greeks were familiar with the western seas. Around 800 B.C. Greek horizons were wider than ever before, but at the same time people were bringing this world under control, fitting it into older ideological frameworks. It is likely that gold and oriental imports were much more common in everyday life in the early eighth century than they had been in the early ninth, but they were no longer being used in ways that disrupted the ritual systems inherited from the tenth century (which also means that they become far less visible in our archaeological record). In coming to terms with the new wealth and sophistication which the expansion of Phoenician activity made available from c. 925 onward, central Greeks renegotiated their peripherality to the Levant.

Conclusion

The most reasonable interpretation of this two-hundred-year history is that the peripheral relationship to the East was something constructed in context by knowledgeable social actors. Some Greeks keenly sought out the East; others resisted it. In some times and places, and some ritual contexts, the East had an overwhelming presence; in other times, places, and contexts, it was apparently consciously ignored. The Greeks were operating under constraints not of their own making. The Phoenicians' agency, which depended partly on military and political events in the Levant, and partly on the availability of items they wanted, such as silver, was critical. But the differing responses of Greek communities presumably had serious implications for the Phoenicians, too. The Near Eastern economic system expanded as it did not just because of events in the Levant, but also because of the ways in which Greeks, Italians, and others responded to the new opportunities and problems. To understand the processes fully, we need to see them from both sides, and the notion of negotiated peripherality is a valuable one.

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6

Production Within and Beyond Imperial Boundaries: Goods, Exchange, and Power in Roman Europe

Peter S. Wells

Introduction

Most of what we know, and think we know, about empires in world history concerns the actions, motivations, and institutions of the imperial societies; we know relatively little about the peoples who are drawn into imperial contexts, through conquest or other means. Most empires have been developed by societies that possessed writing, and the written accounts upon which understanding has been based—by Romans in the Greater Mediterranean world, Spanish in South America, British in India—have been principally by writers who belonged to the imperial society and who represented the perspective of elite members of that society. In the case of early empires, where archaeology plays a major role in our understanding, the material remains of the imperial culture are usually more substantial and more apparent than are those of the societies impacted.

Only relatively recently have historians, archaeologists, and others begun to make systematic attempts to understand the experience of the other peoples involved in interaction with empires—the groups conquered by the expanding empires and those otherwise brought into close contact with them. I distinguish here between the more established research question—what impact did the conquering society have on the indigenous peoples?; and a newer concern—in what ways did the indigenous peoples assert *their* identities and maintain or reinforce *their* cultural systems in response to the challenges and opportunities offered by the expanding empire? Some notable examples of studies that focus on such indigenous groups include Smith's (1986) investigation of elites in societies on the periphery of the Aztec Empire, D'Altroy's (1992) studies of indigenous populations within the Inca Empire, Alcock's (1993) research into Roman-occupied Greece, and investigations by Hingley (1997) and Webster (1997) on native British responses to Roman political authority. Such studies show that the indigenous societies had important effects on the imperial cultures and played

major roles in the creation of new societies within the imperial contexts. In the case I shall discuss below, indigenous groups played major roles in guiding the course of imperial conquest and in the establishment and subsequent management of provincial systems of administration and supply. The question can now fairly be put, to what extent do the central authorities in empires determine the course of events, and to what extent are empires dependent on compromise and negotiation with the societies they incorporate?

A world-systems approach to the question of the role of the conquered and neighboring peoples in empires can help to draw attention to the interactive aspect of all relations in imperial situations (see useful recent discussions in D'Altroy 1992:14-16; Ferguson and Whitehead 1992:4-8). Conquered peoples, and peoples situated beyond imperial frontiers with whom empires interact through trade, all need to be viewed as part of the same ("world") system. We need to view indigenous peoples, not just in terms of how they react to the imperial power, but rather as active participants in the construction of the contexts of interaction (Hall 1986). From this perspective, we can shift our central question from "what effect did the empire have on group X?", to "what effect did group X have on the empire?"

Archaeology can contribute to this development in theory in two important ways. First, archaeology can examine cases of early empires and the changes associated with them over long periods of time. In a landscape for which a good database of archaeological material exists, we can examine changing circumstances and adaptive patterns from preconquest times, through the period of conquest, and in different phases of postconquest time. Such processes of change can take place over several centuries, and the availability of comparable archaeological materials from different periods makes broad-scale studies of change possible. Second, in contrast to historians dependent upon textual sources, archaeologists can examine all levels of society, not just elites and major communities, to gather information about change. In the study of the material manifestations of "everyday life" among the majority of people in a society, and changes in the patterns over time, archaeologists can make their special contribution to research into the broad impact of empires. Whereas historians working with texts depend upon the subjects that interested early writers, archaeologists can consult a theoretically unlimited range of material evidence pertaining to settlement, manufacturing, trade, status expression, and everyday life.

The question that will form the focus of this paper is that of imperial control over resources and production. In the world-systems model, an essential dynamic is that between imperial systems that expand over space and in their capacity to

consume resources, and indigenous societies that interact with the imperial powers (Schortman and Urban 1992:18; Sinopoli 1994). A wide range of different patterns of interaction can be identified in different circumstances. As I demonstrate here, from the evidence of some early empires, the imperial societies had far less control over interaction with other groups than many analyses that have used the world-systems model might predict. The case I examine here is the Roman Empire in temperate Europe.

The Roman Empire in Temperate Europe

Communities in Italy and in the lands north of the Alps had been engaged in trade interactions since at least Neolithic times, and by the first part of the Late Iron Age, 500-300 B.C., both trade and extensive movements of persons across the Alps is apparent in the archaeological evidence (Wells 1980). At the beginning of the fourth century B.C., invaders from north of the Alps attacked towns in Italy, even sacking Rome in 387 B.C. In the subsequent two centuries, Rome built up its defenses and embarked on military expansion throughout the peninsula of Italy. Rome extended its domain across the southwestern Alps into southern Gaul, where it established the colony of Gallia Narbonensis around 120 B.C. (Rivet 1988). Between 113 and 101 B.C. a group called the Cimbri, apparently from northern Europe, moved into central and southern parts of Europe. Together with other groups that joined them, the Cimbri defeated Roman armies in a series of battles until they were in turn beaten at Ferrara in northern Italy in 101 B.C. The early fourth century B.C. attack on Rome, and to an even greater extent the incursions by the Cimbri and their allies in the late second century B.C., had profound effects on Roman thinking about the security of northern Italy and of Rome itself, and about the character of the little-known peoples beyond the Alps (Christ 1995; Timpe 1989:341-343). Roman trade goods are well represented throughout central and western Europe from the start of the second century B.C. (Will 1987). But the Roman decision to embark on the conquest of Gaul in 58 B.C. represented a major departure from earlier patterns of interaction.

There continues to be debate about the reasons for Caesar's decision to invade Gaul. Much recent thinking has emphasized the power politics in Rome at the time, and Caesar's desire for a decisive advantage over his political rivals. But one major factor in Caesar's decision to fight in Gaul, and other Roman leaders' subsequent actions elsewhere in temperate Europe, was concern about establishing a secure frontier to the north, to protect Rome against future threats of attack by groups like the Cimbri (Christ 1995). Between the years 58 and 51 B.C., Julius Caesar led Roman armies in the conquest of Gaul—the lands of modern France, Belgium, Luxembourg, Germany west of the Rhine, and the Netherlands south of the Rhine (Drinkwater 1983). In the year 15 B.C., the

Roman generals Drusus and Tiberius undertook the conquest of the lands that comprise Germany and Austria south of the Danube (Schön 1986). Forays across the Lower Rhine into the region between the Rhine and the Elbe, made in an attempt to extend Roman imperial control to the Elbe, were called off after three legions under the leadership of the general Publius Quintilius Varus were annihilated in the Teutoburg Forest in A.D. 9. Finally, in A.D. 83 Roman armies completed the conquest of southwestern Germany, establishing a new imperial boundary line and wall—the *limes*—to link their Rhine and Danube frontiers (Figure 6.1).

Shortly after the conquest of these regions, Roman administrators organized the division of the landscapes into provinces of the Empire (Filtzinger 1976). Military camps were constructed, particularly along the frontier lines, provincial capitals and other towns established, and a system of roads and bridges built. The broad outlines of these processes, and specific dates of conquests and in some cases of the establishment of military bases and towns, we know from written documents. But the essential issue of how the Roman army, comprising tens of thousands of soldiers, as well as administrators and other imperial representatives in the provinces, were supplied with goods is only sporadically recorded in the written sources (Whittaker 1994).

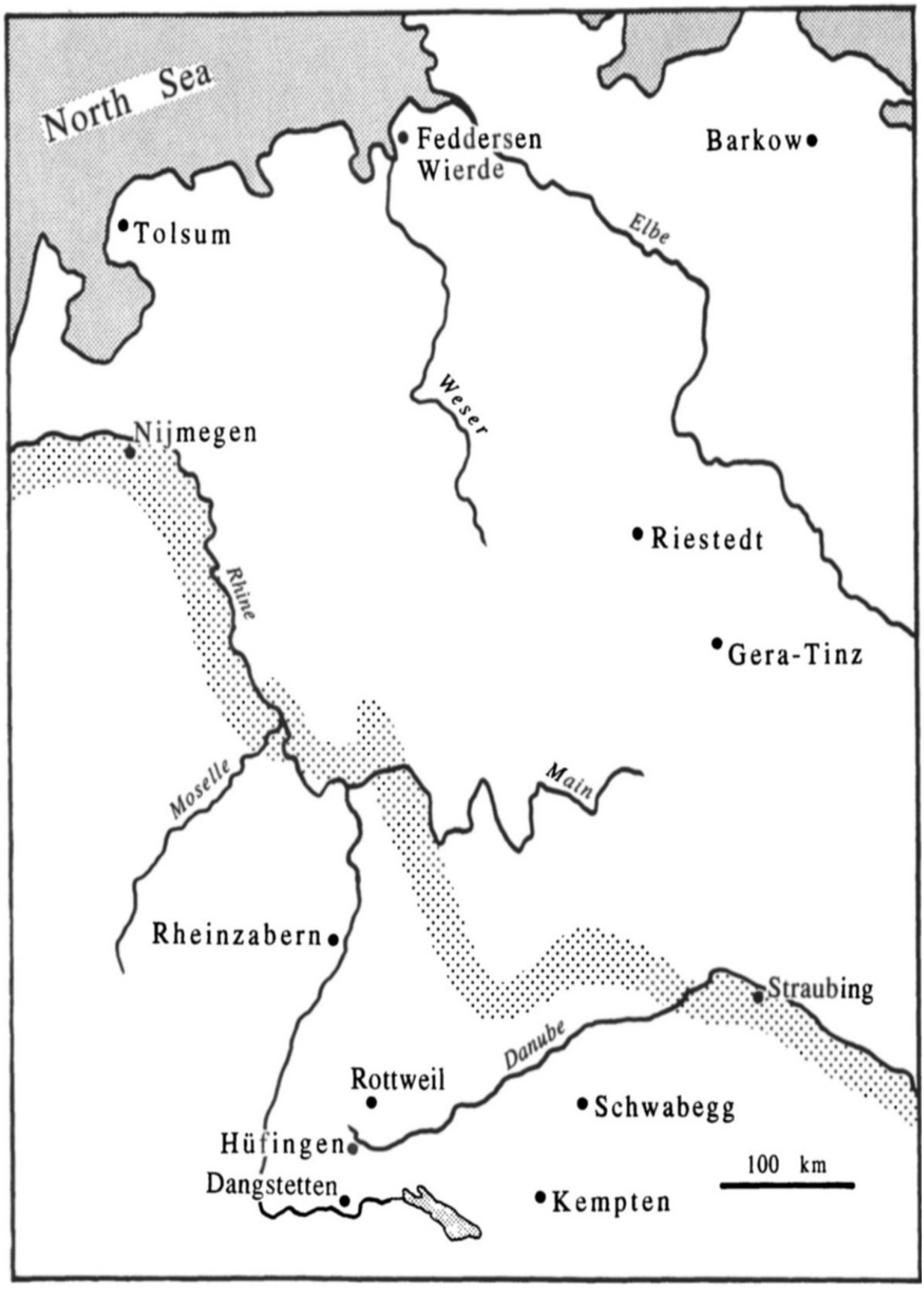
North Sea
Feddersen Wierde
Barkow
Tolsum
Elbe
Weser
Nijmegen
Riestedt
Rhine
Gera-Tinz
Moselle
Main
Rheinzabern
Straubing
Danube
Rottweil
Schwabegg
Hüfingen
Dangstetten
Kempten
100 km

Figure 6.1. Map showing the principal sites mentioned in the text. The shaded band indicates the location of the Roman frontier, with the Roman territories to the west and south.

The establishment of frontiers on the edges of the landscapes conquered by Rome, and the character of the political, military, social, economic, and religious patterns that developed in the frontier territories, have been subjects of active research in recent years. Important studies of the frontier zones and the changes that took place in them include those by Dyson (1985); Barrett, Fitzpatrick, and Macinnes (1989); Maxfield and Dobson (1991); and Whittaker (1994); these works contain extensive bibliographies of pertinent literature. The present essay is intended to be a modest contribution to this broad and rapidly developing field of research on Roman frontier issues. While political, religious, and other factors also played important roles in the interactions between indigenous peoples and Roman occupying forces, my treatment here focuses on aspects of the economy.

There is some debate among Roman historians and archaeologists about how many individuals moved from Italy to temperate Europe following the conquest. The dominant opinion now is that relatively few made such a move (Dyson 1985:5). The principal representatives of Rome in the new provinces were the soldiers; other categories of persons from Roman Italy included administrators and merchants. Thus, the question of how the new imperial presence north of the Alps was supplied is essentially that of how the army was supplied.

Supply and Production

The question of supply for the Roman army can be divided into two main categories, food and manufactured goods. My focus here is on the manufactured products. While the provisioning of the troops with food was overseen by the state (Peacock and Williams 1986:58; Whittaker 1994:101-108), for manufactured products the state seems not to have played an active part in supply, at least during the first and second centuries A.D. (Oldenstein 1985). The manufactured goods needed by the troops included items required for military service, such as weapons, tools, clothing, dress paraphernalia, leather straps, belts, and tents; and everyday items such as pottery. For information about supply systems for these goods, we are almost totally dependent upon archaeological evidence, since the available texts do not say much about this subject (Oldenstein 1976; Sommer 1988).

Within the Imperial Boundaries

Recent research indicates that, in general, for manufactured goods, the Roman state did not maintain centralized production facilities for the military. Instead, each military camp had to make its own arrangements, either setting up its own workshops or arranging with local craftworkers to provide the needed goods (Oldenstein 1976:75-84; Sommer 1988:596; Bishop and Coulston 1993:183-188; Whittaker 1994:112). Much of such manufacturing was carried out by workers in the *vici,* towns that were commonly associated with the Roman camps and that provided a wide range of goods and services to the troops (Sommer 1988).

Production of pottery was sometimes organized on a large scale, though there were many small workshops as well; often, numerous different enterprises manufactured the same kinds of pottery (Greene 1986:158-167). Much of the fine pottery in use in the provinces, especially *terra sigillata,* was imported, initially from Italy and subsequently from newly established production centers in southern Gaul, such as at Lyon and at La Graufesenque, and in central Gaul at Lezoux. Later, as demand for such fine pottery continued to grow, both within the provinces and across the frontiers in the unconquered areas, manufacturing facilities were founded further north and east. Some of them produced great quantities to supply many different communities, including both Roman military camps and civilian settlements. At the manufacturing center at Rheinzabern in southwest Germany, for example, it is estimated that over a million vessels were produced in the workshops every year (Garbsch 1982:11). A number of substantial pottery depots have been identified, where pottery was stored for trade. One such depot found at Kempten in southern Bavaria contained large quantities of *terra sigillata* made in the Rhineland (Czysz 1985:158). It was buried when a fire destroyed the building in the 160s A.D. The depot was situated in the house of a merchant, located in the center of the Roman town, just across the street from the forum; this situation suggests a relatively high status for this merchant. Investigators disagree as to whether such pottery circulated in a free enterprise market (Peacock and Williams 1986:58) or under some degree of state control (Whittaker 1994:110). Small potteries also existed, and some pottery was produced at military camps (Sommer 1988:594). Soldiers at the military sites, including both legionary troops from Italy and auxiliaries from the provinces, also used pottery manufactured in local communities, both plain and painted wares. These ceramics frequently represent a direct continuation of Late Iron Age pottery traditions (Fingerlin 1981; Wieland 1993); often the indigenous pottery on Roman sites is indistinguishable from pottery on local pre-Roman settlements. It seems, therefore, that the defenders of the empire were dependent upon

indigenous craft industries for some of the basic necessities of their daily existence.

Although some limited metalwork was done at the military camps, the archaeological evidence strongly suggests that during the first and second centuries A.D. most was done outside, in civilian-run establishments, often in the *vici* associated with the military bases (Sommer 1988). Evidence includes large numbers of metalworking tools that are commonly recovered in such towns, but not in the military camps themselves (Sommer 1988:597). Some investigators argue that for the most part, the military was not involved in metal production at all, but arranged all supplies of metal goods through indigenous manufacturers (Fischer 1985:482; Sommer 1988:597). In some cases, evidence for the production of metal goods for Roman troops is recovered at places that otherwise have no apparent link with Roman sites. Oldenstein (1976:65) cites an unpublished find at Steinheim-on-the-Main. A house contained the remains of a chest in which was found scrap metal from Roman military equipment. Iron tools found nearby suggest that this building was a workshop that produced metal implements for Roman troops stationed somewhere in the area.

Oldenstein (1976) and C. Wells (1995) provide some numerical information that puts the question into perspective quantitatively. Along the Upper German-Raetian frontier, Oldenstein estimates about 20,000 Roman soldiers served at any one time in the late second and early third centuries A.D.; C. Wells (1995:611) estimates about 90,000 troops stationed on the middle and lower Rhine. Typical weaponry for each soldier included helmet, body armor, shield, spear, sword, and dagger. Helmets and armor were made of iron and leather, shields of wood and leather, with iron bands across the front and iron hand-guards. Spears, swords, and daggers were of iron. In addition to the actual weaponry, each soldier wore an average of ten or more bronze objects, including pins, buckles, strap-ends, and various ornaments (Oldenstein 1976). Thus the total quantities of iron, leather, and bronze required by the Roman soldiers in temperate Europe were vast.

If each Roman military base needed to arrange the supply of all, or most, of these goods from indigenous producers—and the evidence suggests that supply worked this way—then the Roman occupying forces were very much dependent upon the local groups. Without the constant cooperation of the local producers, the Roman venture would have failed. In such a relationship between dependent occupiers and local producers, negotiation and compromise are likely to have played a greater role than exercise of power over the indigenous peoples. Thus the question of the character of relations between representatives of the imperial power, and local indigenous craftworkers and local leaders, becomes a critical issue. The Roman troops must in turn have introduced considerable wealth into

the communities that supplied the needed goods. Such reciprocal arrangements surely contributed in a major way to the growing intensity of economic activity in the provinces of Gaul and Germany during the first and second centuries A.D.

Beyond the Frontier

Interactions between the Roman provinces and the lands beyond the frontier are well documented. The clearest indication of the chronology, extent, and character of the interactions are the large quantities of Roman objects found all over the lands from the imperial frontier northward as far as Norway, Sweden, and Finland, and eastward as far as Russia (Hansen 1987; Hedeager 1987). These Roman-made goods include vessels of bronze, glass, pottery, silver, and gold, as well as coins, statuettes, and jewelry. These objects often occur in exceptionally rich burials, but also on settlement sites and in other kinds of deposits.

Roman writers, particularly Tacitus and Dio Cassius, provide another perspective on Roman interactions with the peoples east and north of the frontier (Hansen 1987:234; Whittaker 1994:113-127). The written accounts mostly concern interactions with peoples in areas close to the frontiers, and they mention as trade goods coming into the Roman lands ox hides, oxen, horses, slaves, weapons, grain (as tribute), and amber. The textual sources are not very precise, and they do not provide much information about source locations or quantities traded. Other goods that are likely to have been involved in such cross-frontier trade (given what we know about interactions in comparable situations in other times and places), but that have not yet been identified archaeologically, include furs, wool, textiles, honey, and wax. The thousands of Roman-made objects that have been found across the frontier indicate that interaction must have been substantial, and there is every reason to think that supplies for the Roman troops were being traded across the border. One key piece of evidence was recovered at Tolsum in the Netherlands. A tablet was found, bearing a Latin inscription that documents a transaction in which Roman buyers purchased cattle from native sellers (Boeles 1951:129-130). Tacitus, writing around A.D. 100, mentions ox hides as tribute paid by the Frisians to Rome (*Annals* 4, 72; Whittaker 1994:113).

The present state of research makes it difficult to link directly goods that Roman suppliers obtained from producer communities across the frontier with archaeological evidence for such a supply system. But there is good reason to think that the rapid expansion of production activities both in iron and cattle in regions close to the frontier was directly related to this provisioning. Roman troops needed large quantities of iron for weapons, tools, nails, and other purposes. The archaeological evidence in regions across the frontier shows rapid

and widespread expansion of iron production during the first, second, and third centuries A.D. (Grünert 1988; Leube 1989; Henning 1991:72), at the time that the Roman army was establishing and outfitting its frontier posts. Examples of such expansion are recently excavated iron-smelting sites at Gera-Tinz in Thuringia (Dusek 1989:561-562), Riestedt in Saxony-Anhalt (Grünert 1988:478), and Barkow in Mecklenburg-Western Pomerania (Leube 1989:162). At Gera-Tinz, for example, investigators found 21 smelting furnaces in an area measuring 10 x 25 m, associated with remains of a small settlement dated by associated pottery to the first, second, and third centuries. Significantly, the production at these sites, and at others in the lands beyond the frontier, was carried out in numerous very small-scale operations. No sizable, specialized iron-producing facilities have been identified in the lands near the imperial frontier, but instead many small farming communities that produced surplus metal. Only at a distance from the frontier, in the Holy Cross Mountains of southern Poland, do we see clear indication of the growth of a large-scale center for the production of iron at this time (Jazdzewski 1965:153-154).

Many sites, particularly on the sandy soils of the North European Plain north and east of the Lower Rhine frontier, show increased production of cattle. Among the best evidence is that from Feddersen Wierde on the North Sea coast near Bremerhaven, Germany. The settlement was established around the middle of the final century B.C., and it was occupied throughout the Roman Period. The settlement surface was built up over time to form a *wurt,* or artificial mound, above the surrounding flat, low-lying land (Haarnagel and Schmid 1984:204-212). Preservation of wood was exceptionally good in the wet environment. The characteristic structure on the settlement is the *Wohnstallhaus,* a long, rectangular building divided into a habitation area for the human occupants at one end, and a barn with partitions for livestock at the other. Analysis of the foundations of stalls in the buildings from the different phases of habitation at the site indicates an increase in the total livestock capacity on the settlement from 98 stalls at the beginning of the occupation to 443 stalls during the second and third centuries (Haarnagel 1975). Imports from the Roman lands are abundant at Feddersen Wierde; they include *terra sigillata* pottery, glass beads and vessels, coins, and millstones (Haarnagel 1975, 1979). The evidence suggests an intensification of the production of cattle during the first and second centuries at the site, and a concomitant increase in quantities of imported Roman trade goods. Around the end of the first and beginning of the second century, the excavator identifies evidence indicating increasing social differentiation. One building was constructed that is larger and more substantial than the others on the settlement. During the second and third centuries, greater concentrations of Roman imports are associated with this structure and its successors, and greater quantities of

metal-working debris are found in and around it. At the end of the second and start of the third century, the large structure on this special part of the settlement was separated from the rest of the site by a palisade.

Next to it was a fenced area with granaries and places where metalworking was done (Haarnagel and Schmid 1984:208). Haarnagel suggests that the occupant of this special precinct directed craft production and trade for the community. In the course of the third century, a decrease in economic activity is apparent at Feddersen Wierde, a process that continues during the fourth century and results in the abandonment of the settlement in the fifth.

Discussion

The maintenance of the Roman Empire's frontier in temperate Europe depended upon supplies produced by local groups, working in manufacturing traditions that had developed in the prehistoric Iron Age. In fact, a substantial proportion of the goods provided to the Roman troops were versions of prehistoric Iron Age materials. Pottery and fibulae are two categories of goods that illustrate this pattern. Pottery provides important evidence, since it is well preserved and abundantly represented on both native and Roman sites. Monochrome handmade pottery virtually identical to that at Late Iron Age sites such as Manching (Stöckli 1979), Altenburg, and Kelheim (Wells 1993), has been recovered on numerous Roman Period settlements, for example at the military camp at Dangstetten on the Upper Rhine (Fingerlin 1986; Wieland 1993), at Rottweil in Württemberg (Planck 1975), and at Kempten in Bavaria (Mackensen 1978; von Schnurbein 1993). Fine wheel-made pottery decorated with horizontal and vertical red painted bands matching a typical ceramic category from the Late Iron Age similarly occurs on numerous Roman sites, including Kempten and Straubing. Many fibulae (ornamental clothing fasteners) from the military sites are of forms that are identical to local Late Iron Age types or that derive directly from them (e.g., Planck 1975, plate 67, from Rottweil; Rieckhoff 1975, plates 1 and 3, from Hüfingen), It is thus apparent that a substantial portion of the objects used in everyday life at the Roman military sites were manufactured by the indigenous groups in the surrounding landscape, working in their traditional technologies and styles.

As Roymans (1983:58) argues from the Dutch evidence, the Roman occupiers surely stimulated the economies of the indigenous communities—both within and beyond the imperial frontier—by arranging to acquire from them the goods they needed. As the needs of the Roman army grew, some local groups shifted their technology and style of production to suit the wants of the Roman occupying troops, as well, of course, as others who desired the new "Roman" fashions. This

process of transformation of indigenous craft traditions is well illustrated in the sequence of pottery production at Schwabegg in Bavaria (Czysz 1987). Kiln debris, including typical Late Iron Age pottery, on the site attests to production at Schwabegg before the Roman Period. Early in the first century A.D. a specialized pottery manufacturing community was established at the site, and by the end of that century it had become a highly specialized center, producing a variety of kinds of pottery and serving a wide market. Among the pottery manufactured was a fine ware with white paint and red painted bands, a type that represents the continuation of a characteristic Late Iron Age ceramic. From this period, 55 kilns have been identified on the site. Continuity in the manufacturing traditions is apparent not only in the form and decoration of vessels produced, but even in the identity of the personnel—a high proportion of the personal names represented in stamps on the pottery are local Celtic names. Toward the end of the second century, the pottery industry at Schwabegg began to specialize in the manufacture of *terra sigillata*. The products were shipped to communities in all directions from Schwabegg, and they have been identified at forts on the *limes* and as far east as the province of Pannonia.

This example of pottery production at Schwabegg indicates that we need to view the pattern of supply along the frontier as an interactive system, with the Roman occupiers dependent upon local producers, and the local manufacturers adjusting the output of their traditional industries to suit the scale and taste of their customers. Some local individuals gained in wealth and status through this commercial arrangement, and they are represented in unusually rich burials during this period—burials reflecting the practices of the prehistoric indigenous peoples, but with Roman as well as native goods in them. An example is Grave 8 at Nijmegen in the Netherlands, dating to between A.D. 80 and 100 (Koster 1993). The grave contained the remains of a cremation, placed inside a glass urn, and numerous other goods, in traditional Iron Age, and distinctly non-Roman, fashion. The goods included weapons (three spears and a shield), a 23-piece dining set of *terra sigillata* from the production center at La Graufesenque in southern Gaul, numerous ornate glass vessels, five bronze vessels, and a set of writing implements. The identity with Rome is emphasized by the pottery, glassware, and writing utensils; but the composition of the grave assemblage shows that it belongs to the native, pre-Roman, tradition.

The examples cited above are only a very small portion of the rapidly-accumulating evidence that indicates that much of the material culture known as “provincial Roman” was in fact made by indigenous peoples in the conquered territories, often using manufacturing techniques and expressing styles that developed directly from their pre-Roman, Iron Age craft traditions. Such

evidence, which is only now gaining serious, focused attention among investigators (e.g. Millett 1990; Wieland 1993) raises the fundamental question, what does the word "Roman" actually mean in this context (Barrett 1997; Freeman 1993)? It is clear now that most of the architecture and everyday material culture that is classified as "Roman" in temperate Europe was not made by individuals from Rome nor even by Roman citizens resident in the provinces, but rather by indigenous parties who, after the conquest, found themselves living under the Roman political structure and amidst the persuasive influence of Roman fashion. As the archaeological evidence makes abundantly clear, after the conquest (and even before it, to a limited extent) Roman material culture and style became extremely popular with the majority of the populations of the provinces. Most people seem to have wanted to be as "Roman" as they could, displaying this new identity through the adoption of all possible aspects of Roman material culture, including pottery, personal ornaments, clothing, tools, and architecture. Agache (1978) demonstrates the indigenous adoption of the "Roman" villa as a style of habitation, and Jones (1987) argues that essential features of the "Roman" cities and towns in temperate Europe were sponsored and constructed by local elites in the context of indigenous rituals of competition. We must therefore understand the word "Roman," when used in reference to temperate Europe, to designate a style—of architecture, pottery, weaponry, ornaments, and so forth—that was eagerly adopted by local people as a means of demonstrating their feelings of identity with the new cosmopolitan civilization under whose dominion they lived. This fashionability of the Roman style among the indigenous peoples did not last long.

Already during the first century A.D., within a century after the conquest, new styles of material culture, often with strong elements of the prehistoric Iron Age traditions, developed in the Roman provinces. Among the best examples are several new categories of pottery that were established during the first and second centuries in temperate Europe. One is "Raetian ware," a type of hard-fired, polished pottery with relief decoration, that became immensely popular late in the first century A.D. and was produced by numerous local workshops in Bavaria (Czysz 1985:159-160). "Norican ware" was another new product of the first and second centuries. It was made in small-scale potteries and is characterized by hard-fired, wheel-made vessels with coarse temper and rough surfaces. Decoration is in the form of comb incisions, incised wavy lines, and profiled ridges. Maier (1983) argues that Norican ware, which embodies elements from the Late Iron Age ceramic tradition, represents the expression of indigenous identity, asserting itself against the growing homogeneity of much of Roman material culture.

Beyond the frontier, there is no evidence of "exploitation," in the sense of the Roman Empire draining resources away from the indigenous communities. The evidence suggests rather what Hall (1986, 1989) has called "incorporation." According to Hall's model, incorporation is a process by which non-state societies that interact with imperial states become linked economically with the imperial states. As a result, both societies undergo certain changes in social and political configurations. The non-state societies play active roles in such changes. The archaeological evidence shows an increase in local industrial and livestock production for supply to Roman provinces, as noted above in the examples of ironworking and cattle raising, along with a wide range of changes associated with the economic upswing (Leube 1989:164). These changes, which are apparent in many different regions across the imperial frontier, include the formation of larger communities, development of new technologies, adoption of new styles from the provincial Roman world, and greater expression of status differentiation, largely through display of Roman luxury imports (Hansen 1987), but also through extravagant employment of indigenous architecture and craft products. There is no evidence, either archaeological or textual, to suggest that the Roman Empire exercised any kind of control over the peoples beyond the frontier or over their production of the goods that were desired by the Roman provinces.

The evidence that I outline in this chapter pertaining to the situation in Roman Period temperate Europe suggests that we need to question even the extent to which the Empire controlled resources and supply *within* its own borders. If each military base was dependent upon production of foodstuffs, pottery, and metal equipment by communities of indigenous peoples, then a model of power and control is not the best way to examine this relationship. Instead, we need to address issues of negotiation, interaction, and mutual self-interest in order to come closer to understanding relations between the imperial power and the indigenous groups. These considerations lead to the question, who exactly is the empire, when we speak of provincial Roman actions north of the Alps? Whose interests are represented by the concept of the empire, and who carries out decisions to further those interests? The material evidence suggests that a wide variety of different interests were involved, and that treating the empire as a united entity is not helpful in understanding the dynamics of the relationships. The techniques of archaeology allow us to examine these relationships in detail and over time. The example of Feddersen Wierde illustrates how instructive such cases can be when evidence for long-term processual change in patterns of settlement structure, local production, and long-distance trade can be examined.

Building a Model: From the Specific Case to an Analytical Framework

The Roman Empire in temperate Europe provides an instructive case for examining questions of imperial relations with indigenous peoples, both within and beyond the empire, because of its unusually rich and well-studied data base. We can use this context to develop an analytical framework that can be profitably applied to other situations of imperial relations with indigenous peoples. For this study, I have examined the issue of the provisioning of the empire's military force, since that problem should provide insight into the most extreme concern of supply for the Roman administration. The very basis of the security of the Empire in temperate Europe was the army; and the security of Rome rested upon the security of the provinces to the north.

The evidence regarding the ways in which the Roman army solved this problem of supply, outlined above, makes necessary a full rethinking of notions of imperial power and control. World-systems theory, when applied to empires, has sometimes viewed imperial activity too rigidly and narrowly, without taking into account the myriad local interactions between representatives of the empire and indigenous groups. These interactions—in all their variety—can be examined through focused archaeological research on settlement and cemetery sites at different locations, both within the imperial territories and beyond them. In the case considered above, the necessity of supplying troops on the frontier indicates the need for negotiation and adaptation on the part of the army and its personnel. This case points up the need to reorient our investigations of imperial situations away from questions of power and how it is used, to questions of interests, mutual interdependence, and interactions maintained to further the interests of all involved.

The insights offered by this case can be used to develop a general framework for analysis of relations between imperial powers and the indigenous peoples with whom they interact. It is clear that we cannot accept uncritically the contents of surviving written documents from the imperial societies, but must examine the material evidence in the ground. The Roman case presented here shows that relations between the empire and indigenous groups were situational—Roman troops needed to supply themselves with goods, and they needed to secure these goods through arrangements established with local groups. Any further detailed analysis of these relations needs to focus on the economic, social, and political configurations among the local peoples and to include examination of such variables as environment, community size and organization, and craft traditions, in order to reconstruct the development of commercial relations between Roman consumers and indigenous producers.

Analysis must begin by assessing the needs of the imperial power in the particular environment, then turn to establishing potential sources for filling those needs. Production sites in the landscape will provide the clearest evidence of the sources—in the case above, kilns, iron-smelting furnaces, and barns for raising cattle. After the sources have been identified, then analysis can turn to evidence for the response of communities to the opportunities presented by interaction with representatives of the imperial power. Evidence will be in the form of imported goods, and of local craft products that show effects of interaction such as adopted technologies and styles. Change evident in the indigenous communities, such as growth in community size, expansion of production facilities, and increasing differentiation expressed in houses and graves, can be integrated into this analysis. My intention in presenting this particular case of Roman troops in temperate Europe is to use the specific instance to draw attention to some of the different kinds of evidence that can help us to analyze the content and character of interactions between empires and indigenous peoples.

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7

The Emerging World-System and Colonial Yucatan: The Archaeology of Core-Periphery Integration, 1780-1847

Rani T. Alexander

Introduction

Wallerstein (1974a) originally defined the modern capitalist world-system as an economic entity integrating multiple sociocultural subsystems through a single division of labor and the exchange of staple products. The economy of outlying cultural subsystems, often referred to as "peripheries," becomes commoditized and specialized towards the export of goods and staples that are consumed in the system "core." Substantial quantities of goods manufactured at top-ranking centers within the world-system are distributed to the periphery as a means of extracting surplus value from hinterlands. The result is a division of labor between cores and peripheries that fosters periphery dependence on the core (Wallerstein 1974b).

Although descriptions of the modern world-system assume a capitalist mode of production, attempts have been made to use a more general core-periphery model to describe precapitalist and prehistoric political economies (Blanton and Feinman 1984; Blanton et al. 1992; Kohl 1987a; Rowlands et al. 1987; Santley and Alexander 1992; Schortman and Urban 1987, 1992). Many of these studies indicate that interaction between the core and periphery is variable, especially with regard to the hinterland's dependence on the core (Kohl 1987b, 1992). World-systems models are difficult to apply to prehistoric macroregional networks because they do not specify how the world-system affects processes of political-economic expansion, centralization, or segmentation, and variability in core-periphery relations generally lacks archaeological correlates (Price 1986). What exactly are the archaeological indicators of core-periphery integration? How can one recognize differences in the organization of macroregional systems archaeologically? The archaeological record of the *Parroquia* (Parish) *de Yaxcabá*

is analyzed below to evaluate material correlates of world-system expansion against documentary evidence in this historically-known region.

This chapter examines the proposition that the modern world-system is based on a single division of labor and that differing modes of production are geographically segregated between cores and peripheries. With reference to the history of *hacienda* expansion in Yucatán, I argue that the world-systems model understates the variability of economic articulations, production autonomy, and the range of adaptations in rural hinterlands that are so evident in their archaeological material patterning. I attempt to show that core-periphery differentiation and dependency are variable processes that contribute to structural differences among macroregional systems.

In the modern world-system the division of labor that promotes dependency between a center and its hinterland affects the organization of labor and production at the household level (Smith and Wallerstein 1992; Smith et al. 1984). The state institutions within world-systems must integrate local subsistence economies with the larger system in order to appropriate resources and services for their support (Brumfiel 1993; Brumfiel and Earle 1987; Claessen and van de Velde 1991). In preindustrial agrarian states, the mobilization of surplus usually necessitates intervention in household production, because households as a rule do not generate large amounts of produce beyond their subsistence needs (Brookfield 1972; Brumfiel 1993; Halstead and O'Shea 1989; Sahlins 1972). The extraction of resources from hinterland communities by the state affects tactics of intensification, diversification, and specialization that households adopt to compensate for their participation within the macroregional system. In the modern world-system capitalist accumulation requires commoditized labor and formation of a proletariat that consequently results in drastically altered household structures (Wallerstein and Smith 1992).

World-system expansion, however, does not always lead to increased wage labor and commodification (Wallerstein 1984; Wallerstein and Smith 1992). The proportion of household resources derived from wages or market participation does not always correlate with the household's geographic proximity to the core or its location within a semiperiphery or periphery. I submit that the world-systems model has been unable to account for the maintenance of household autonomy in the allocation of social labor, because it treats household form and function as dependent variables (Wilk 1991; Wolf 1990). Defining households as capitalist, income-pooling units and characterizing precapitalist households as "primordial" (Stauth 1984), sustainers of a "natural economy" (Evers et al. 1984), and a "community" form of labor organization (Wallerstein 1984), misconstrue the complexity of the relations of production in both prehistoric and modern

contexts. As Wilk (1991:23-25) points out, these views simply create a new developmental typology in which household labor evolves from traditional, to partially-waged, to capitalist, that brings us back to modernization theory, dependency, and underdevelopment.

In the present paper, the term household refers to an activity group that carries out functions of production, consumption, coresidence, transmission, and reproduction (Netting 1993; Netting et al. 1984; Wilk 1991; Wilk and Netting 1984; Wilk and Rathje 1982). Below I present a case study in the household-level, archaeological site structure of three late Colonial period settlements in the *Parroquia* of Yaxcabá, Yucatán, Mexico. The study explores the archaeological indicators and spatial patterns which may signal differences in the articulation of hinterland settlements in Yaxcabá Parish with the centers of Mérida, Mexico City, and Madrid. Archaeological variation in house lot structure is used to infer production and labor organization at the community level for three hinterland settlements whose relations with the core vary historically.

Disenfranchisement, Credit, and World-Systems

According to Wallerstein and Smith (1992; Wallerstein 1984), the household is the basic unit of the emerging world-system. The inexorable trend towards accumulation and commodification leads to increasing proletarianization of the population and the production of surplus value that reshapes household structure. In Wallerstein's words (1984), capitalism "tears households away from territory" and reduces the importance of kinship and coresidence as bases for pooling income and defining household boundaries. Commoditization produces economic crises to which households respond by increasing the proportion of household income derived from wage labor. In some circumstances, however, domestic units may expand subsistence activities and access to non-wage labor (Smith 1984). This anomaly, the intermediate or "partially-waged" household structure, retards the pace of proletarianization (Wallerstein 1984). Freidman (1984) suggests that peripheries in particular demonstrate two anomalies within the modern world-system: (1) Only a minority of the population participate in wage labor on a full time or constant basis; and (2) wages are often not sufficient to sustain and reproduce the labor force over time. These theorists face a dilemma that fails to explain the persistence of subsistence and non-wage labor within the world-system.

The world-systems model oversimplifies the economic and geographic relations of primary producers to the means of production and to the macroregional system. Economic reorganization on the periphery is conditioned by several variables that determine how labor ultimately becomes divided within

the system. Two important variables in this process are (1) disenfranchisement, the removal or restriction of control over the means of production (tools, resources, land) from primary producers; and (2) the extension and availability of credit to individuals or households that may experience shortage. The interaction of these two variables influences the periphery's dependence on the core. Capitalism removes household labor from subsistence production and transfers it to the production of commodities that permit capital accumulation via the extraction of surplus value (Wolf 1982). This is accomplished through disenfranchisement, which at its extreme results in commoditized labor. Disenfranchised laborers who specialize in the production of non-subsistence goods, however, must also be able to convert their labor (wages) into subsistence resources. In the modern capitalist world-system, liquidity (the ability to convert one product to another) is achieved through a diversified market system and a monetary economy that facilitates the extension of credit to bridge temporal and spatial gaps in the supply of products.

Nevertheless, in some rural areas disenfranchisement and the availability of credit have not always produced the division of labor between cores and peripheries characteristic of the modern world-system (Cook and Binford 1990; Wilk 1991). Displacement of population from the core to the periphery frequently provides the impetus for disenfranchisement and for making new forms of credit available in hinterlands. The new arrivals attempt to replicate the capitalist mode of production predominant at the system center in outlying areas. Depriving existing hinterland populations of control over the means of production, however, is a protracted negotiation that is not always "successful" from the capitalist's point of view. Households and communities may retain considerable autonomy in the deployment of labor or structural power (Wolf 1990). Similarly, credit may not be readily available in rural areas, and those attempting to replicate the capitalist mode of production may have difficulty converting extracted products into wealth. Households do not react uniformly to processes of disenfranchisement and the extension of credit that may accompany capitalist expansion. Several recent studies demonstrate that hinterland participation in the expanding commercial sector is mediated by local ecological conditions and household labor organization that constrain production (e.g., Cook and Binford 1990; Little 1987; Netting 1993,1968; Steir 1982; Wilk 1991).

Historical Background

The conquest and colonization of Mexico and Central America by Spain during the period 1519-1821 constitutes a part of the development of a global, macroregional network of interaction that has become known as the modern or capitalist world-system (Braudel 1984; Frank 1978; Wallerstein 1974a).

Furthermore, the expansion of the world-system to New Spain can be described as a consequence of Spain's worsening position relative to the rest of Europe over the course of two centuries (Braudel 1984; Ringrose 1983).

After the reconquest of Spain in the late fifteenth century, state policies irrevocably damaged the economy. First, increase of wool production by forbidding the enclosure of land produced an imbalance between stockraising and agriculture, resulting in severe grain shortages in the sixteenth and seventeenth centuries (Lynch 1981). State protection of the wool trade (raw wool was often exported in bulk to the Low Countries) and a lack of emphasis on agricultural production resulted in famine, necessitating large scale imports of wheat by the beginning of the sixteenth century. The expulsion of the Jews in 1492 and the subsequent expulsion of the Moors effectively eliminated the small merchant-artisan class (and their capital) and reduced the numbers of agricultural workers which further narrowed the spectrum of the Spanish economy. Spain's unfavorable balance of trade with the rest of Europe continued through the seventeenth century, and the country became increasingly dependent on foreign supplies (Lynch 1981; Vicens Vives 1969). The growing Spanish population was supported by importing agricultural and secondary products from elsewhere in Europe. These goods were paid for by re-exporting materials extracted from New Spain such as cochineal dye, hides, sugar, and especially silver. Currency inflation reached a crisis in 1680 when the devaluation of the peso caused wholesale prices to drop by nearly half (Vicens Vives 1969). By 1700, plague epidemics and famines had reduced the Spanish population by 25 percent.

The seventeenth century was also a period when the maritime trade of Europe became integrated within a continent-wide market system (Braudel 1984; Ringrose 1983; Wallerstein 1980). As exchange systems centered in England and the Low Countries dealt more with bulky staples, such as wheat, fish, and textiles, they outcompeted the Spanish economy. Spain's weakened economy, however, held several implications for the autonomy of her colonies, especially Mexico City. The inability of the mother country to supply her colonies with sufficient manufactured goods promoted a florescence of local commerce in the New World (McAlister 1984). The Spanish American colonies became more self-sufficient, producing their own textiles, wine, olive oil, tallow, and minting their own money. Although the Crown tried to limit trade with the Orient, the colonies exchanged silver for wax, spices, porcelain, and Chinese silk, and substantial trade developed between Mexico City and Peru (Brading and Cross 1985; Clayton 1985). Contraband trade also rose during this period. By the end of the seventeenth century most goods could be produced in the New World, and the colonists relied on Spain only for mercury (for extracting silver via the

amalgamation process) and the highest grade luxuries (Boyer 1977; McAlister 1984). Mexico City became the preeminent central node of Spanish American communication and commerce within the emerging world-system.

During this period Yucatán comprised a peripheral backwater of the Spanish empire. Attempts to more fully integrate the area with the macroregional system date to the late 1700s when the recovery of the native population and the institution of the Bourbon reforms induced a transformation from a tribute-based to a market-based economy (Farriss 1984, 1986; Patch 1993). The integration of Yucatán with the Spanish world-system produced economic changes corresponding to increased production of cash crops (sugar, henequen, and cattle) and the diffusion of *haciendas* into rural areas. *Haciendas* were large Spanish-American-owned estates incorporating large numbers of resident workers for the production of commodities for the local market. The expansion of distinct kinds of *haciendas* in various geographic regions had a variable impact on subsistence economies in different areas of the peninsula. Sugar production, situated in the southwest part of the peninsula, and henequen production, centered in the northwest, required large permanent labor forces, whereas cattle raising was not a labor intensive activity. Consequently, the cattle *haciendas* of central Yucatán did not require large numbers of workers on the estates. Sugar production and cattle raising required large amounts of arable land, and in the southwest and central regions the *haciendas* competed for land with subsistence agriculturalists. Henequen, on the other hand, could be grown on very poor soils, and its production did not always compete with maize (Strickon 1965). The market transition did not occur evenly throughout the peninsula, and in central and western Yucatán it resulted in a protracted series of conflicts over the distribution of land, culminating in the Caste War of Yucatán in 1847 (Cline 1950; Patch 1985; Reed 1964).

History and Archaeology in Yaxcabá Parish

The *Parroquia de Yaxcabá* is located in the cattle-raising region of central Yucatán, and during the mid-eighteenth century it lay at the edge of Mérida's marketing sphere (Patch 1993) (Figure 7.1). From 1780 to 1847, the population grew rapidly, dispersing from its two original congregated towns, Yaxcabá and Mopila, into twenty-nine separate communities (AME 1784; López de Cogolludo 1954; Relaciones Histórico Geográficas 1983). From 1778 to the Caste War of 1847, the population of the Parish nearly tripled (Figure 7.2). An extensive archaeological survey of the settlements listed on the *visitas pastorales* for the Parish revealed a four-part settlement classification based on the attributes of site size, amount of masonry architecture, and site layout. The classes consist of the *cabecera* (Yaxcabá), *pueblos,* independent *ranchos,* and cattle *haciendas*

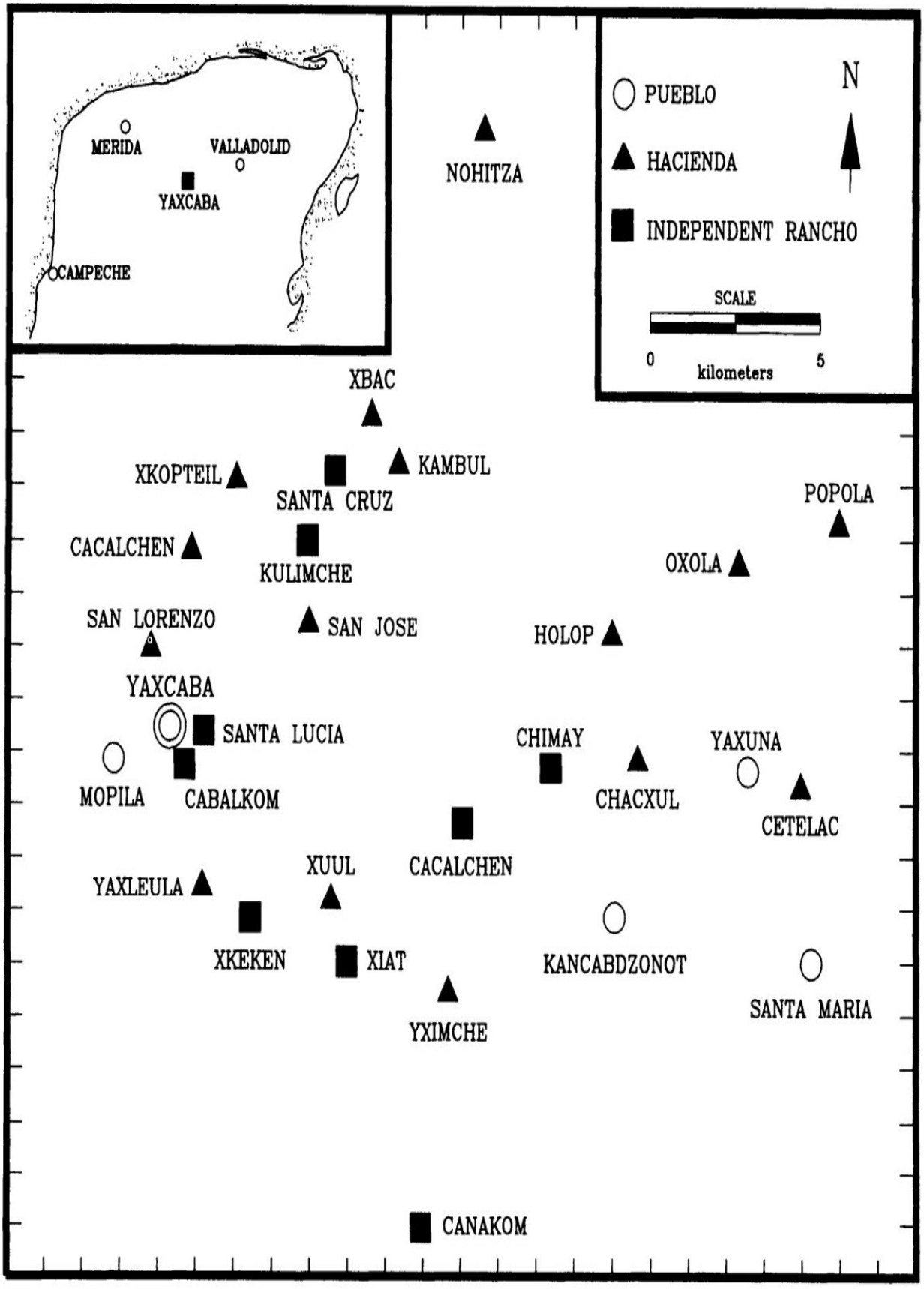
(Alexander 1993; AME 1784, 1804, 1828, 1829). Historical information demonstrates that the *cabecera* and *haciendas* were the settlements most closely integrated with the colonial economy, followed by the *pueblos,* whereas independent *rancho* settlements were only loosely articulated with the colonial system..

Table 7.1 describes two trends evident from comparing the archaeological settlement classification to the historical data on the changing population within the settlements. First, the number of cattle *haciendas* increased by 24 percent (from 6 to 15), yet only about 10 percent of the Parish population resided on the estates (AME 1784, 1804, 1828). This suggests that by 1828 a disproportionately large amount of land was used to support cattle, and less land was available to subsistence agriculturalists. Second, there was an increase in the number of *pueblos* from one to four and a corresponding decline in the number of independent *ranchos.* Three independent *rancho* settlements were reclassified as *pueblos* in the historical documents, and the date of construction of a church in each of these settlements corresponds to the date of historical reclassification. Most of the population growth occurred in the *cabecera* and the *pueblos*. The result was that more people were integrated into the subsistence sector of the economy, making them subject to church and civil forms of tribute and taxation.

After independence from Spain in 1821, land classified as *monte del rey* and open to all for use, became *terreno baldio* (vacant land) and subject for sale (Farriss 1984; Reed 1964). Many claims made by *hacienda* owners in Yaxcabá Parish bordered the communal lands of newly established *pueblos* and independent *ranchos,* and legal title to some of these lands was subsequently purchased. A rough estimate of the total area claimed as *terreno baldío* suggests that it represented about 21 percent of the total land area of the region (Alexander 1993). The three independent *ranchos* that sought pueblo status in the early 1900s may have reacted to increased land stress. Becoming a *pueblo,* manifest by constructing a church, may have legitimized the inhabitants' claims to communal land surrounding the settlement, even though they would have been subject to civil and ecclesiastical taxes.

The economic role of the large cattle estates demonstrates variation from what would be predicted following the world-systems model. The historical evidence indicates that cattle-raising with subsidiary maize cultivation was the principal activity on the estates (BCCA 1778; Patch 1993). There is a dearth of evidence, however, regarding the sale of individual animals, the production of meat and hides, or the *hacienda's* links to markets in Mérida or Valladolid. Conversely, historical information relating to the multiple mortgages and sale of these estates is plentiful. Some individuals or families acquired as many as five estates, and it

was common for them to own multiple residences in Yaxcabá or Mérida. The cattle *haciendas* seem to have functioned partly as a source of capital and collateral, rather than as "factories in the field" operating under a capitalist mode of production. The cash and capital Spanish-Americans needed to conduct economic activities in the urban centers was acquired by mortgaging their property based on the number of head of cattle and the value of buildings and facilities on the estate (Alexander 1993).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SAN JOSE
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YAXCABA
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***Figure 7.1**. Locations of settlements in Yaxcabá Parish, 1780-1847. Inset shows location of Yaxcabá in Yucatán,*

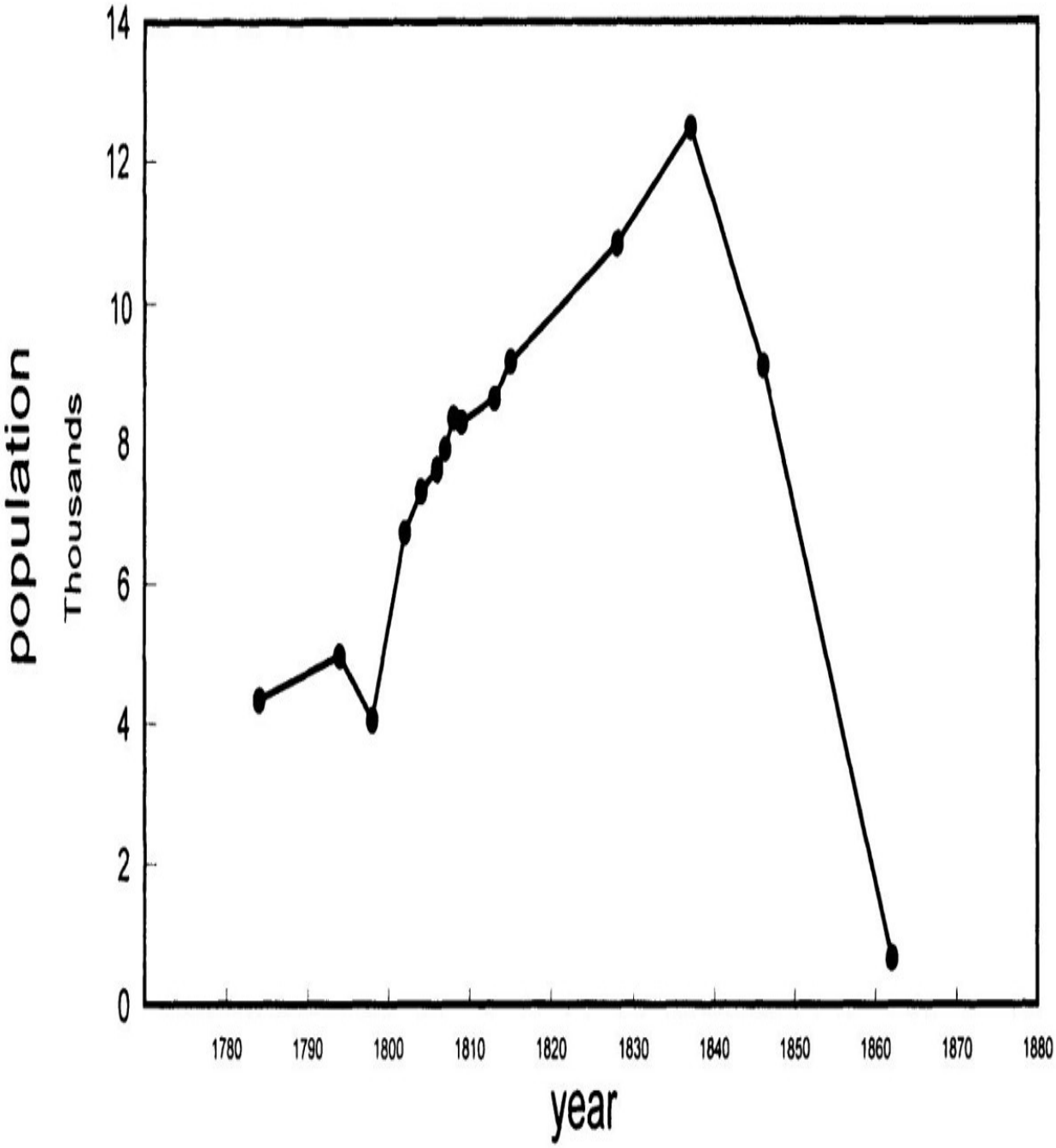

***Figure 7.2**. Population in Yaxcabá Parish, 1780-1862.*

World-system expansion in the late eighteenth and early nineteenth centuries in Yucatán created variable pressures on different parts of the settlement hierarchy in terms of land stress and the availability of credit. Cattle raising, especially in this instance, was not a labor intensive activity and thus provided little impetus for aggregating laborers on the estates. Most workers were sharecroppers (*luneros*), rather than completely landless wage laborers (Granado Baeza 1845). As a result, opportunities for households of the subsistence sector to supplement their income by means of wage labor or sharecropping on the *haciendas* were limited, and credit requested of the *hacienda* owner by his workers was not predominant in the region as a whole. The expansion of the *haciendas,* representing the commercial economic sector, at the expense of the pueblo and independent *rancho* communities, the subsistence sector, indicates that attempts to disenfranchise indigenous inhabitants from their land were underway during this period. The inability of the cattle *haciendas* to incorporate a growing population on the estates suggests that the process of disenfranchisement was incomplete and did not result in a large number of landless laborers who could then be employed in the commercial sector. The *hacienda* did not "replace" the indigenous community as the principal social and productive unit in the region.

Archaeological settlement patterns mirror the division between sites historically known to be integrated into the commercial cattle raising sector, the *cabecera* and *haciendas,* and sites of the tributary-subsistence economic sector, the *pueblos* and independent *ranchos*. The division is marked by the distribution of masonry *architecture* that is stylistically similar to structures in Mérida, the administrative center of the province. In the early nineteenth century, several structures in the Parish exhibited a colonial architectural style characteristic of the core: the municipal building and the curate's residence in Yaxcabá, churches, shrines, elite Spanish-American residences (*quintas*), the main house (*casa principal*) and central complex of buildings and facilities of *haciendas,* and wells (*norias*) that used animal traction or windmills to draw water from below. The architecture is characterized by masonry construction, often with a decoration of small stones set into the outer surface of the wall (*rajueleado*), columns with decorated capitals, scalloped doorways with decoration above the lintels, and elaborate, arched stone gateways.

***Table 7.1**. Population distribution among settlement types in Yaxcabá Parish.*

Settlement Type	1784 #	1784 Pop.	1784 %	1804 #	1804 Pop.	1804 %	1828 #	1828 Pop.	1828 %
Cabecera	1	1,491	34	1	3,292	45	1	3,128	28
Haciendas	6	343	8	7	632	9	15	1,058	10
Independent Ranchos	11	2,413	55	7	2,522	34	6	2,241	20
Pueblos	1	155	4	2	876	12	4	4,625	42
Total	19	4,402		17	7,322		26	11,052	

Sources: AME 1784, 1804, 1828, 1829.

Table 7.2 presents the distribution of masonry architecture and the number of colonial buildings per site for each site class. The *cabecera* contains the greatest number and diversity of architecturally elaborate buildings. It has a municipal building, two churches, a large curate's residence, and more than twelve *quintas.* Fifteen cattle *haciendas* are located in the surrounding area, most containing casas *principales* that are stylistically similar to the *quintas* in Yaxcabá. The four *pueblos* in the Parish each have a church, and two have small *quintas.* For the most part, however, *pueblos* are characterized by the predominance of non-elite house lots. Independent *rancho* settlements are similarly distinguished by the prevalence of house lots, and they lack elaborate architecture except for small masonry shrines, chapels, and sometimes *norias.*

Table 7.2. *The distribution of colonial architecture in Yaxcabá Parish.*

Settlement Type	#	1	2	3	4	5	6
Cabecera	1	1.00	2.00	1.00	1.00	12.0	1.00
Pueblo	4	0.00	1.00	0.00	0.25	0.50	0.25
Hacienda	15	0.00	0.00	0.00	0.07	0.80	0.93
Rancho	11	0.00	0.00	0.00	0.64	0.00	0.18

Note: All figures refer to frequencies of buildings per site for each class. 1=municipal buildings, 2=churches, 3=curate's residence, 4=shrines, 5=quintas or casa principal, 6=norias.

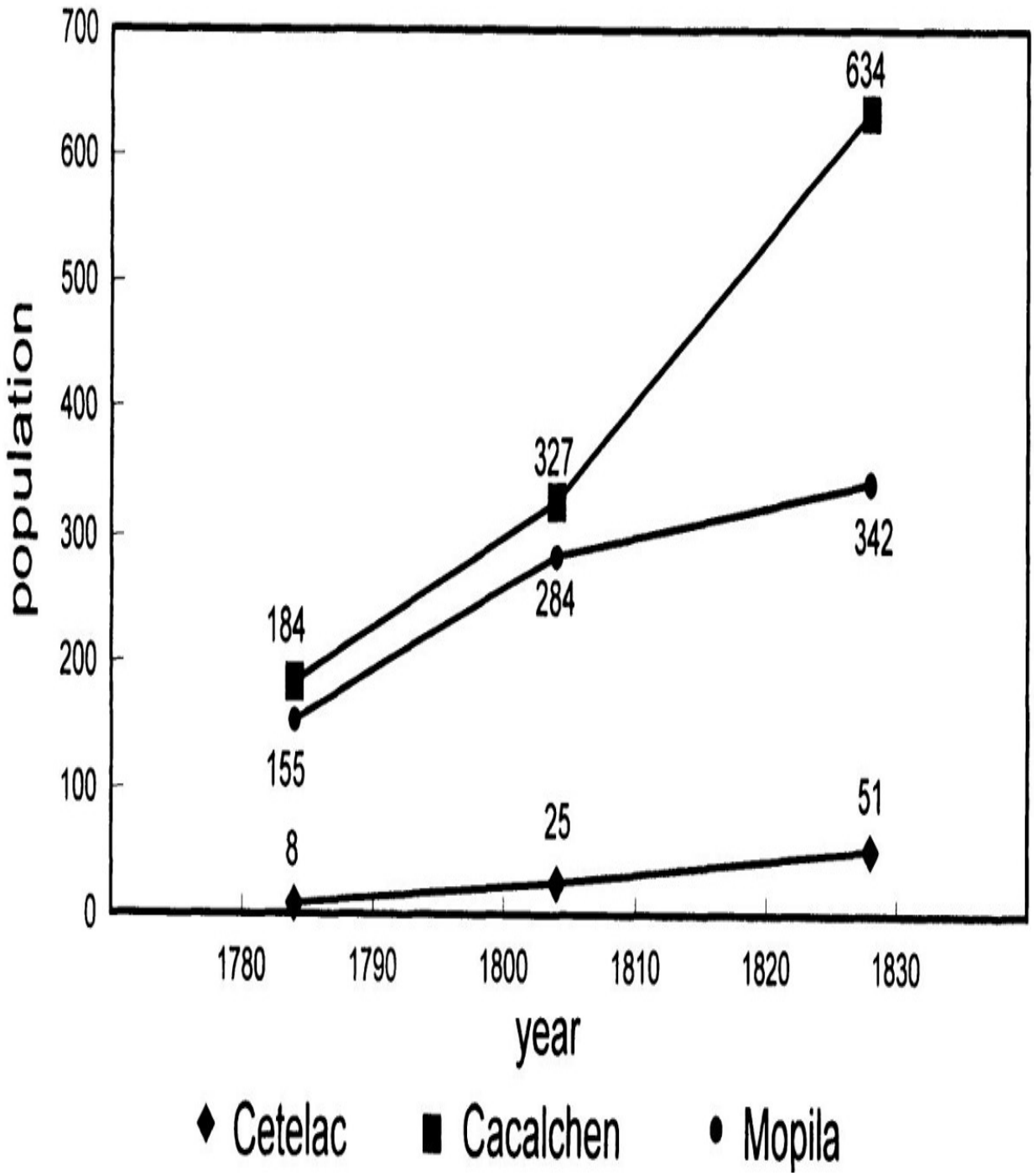

***Figure 7.3**. Population growth at Mopila, Cacalchen, and Cetelac, 1784-1828.*

The distribution of architecture that is stylistically related to the system core seems to correspond to the economic integration of settlement classes. The

cabecera and the *haciendas,* closely associated with the expansion of commercial interests in the region, contain residential, civic, religious, and productive architecture typical of colonial structures in Mérida. The amount of colonial architecture in the *pueblos* and independent *ranchos,* however, is considerably reduced and mostly limited to structures of religious function. Settlements less well integrated with the colonial regime are characterized by aggregations of house lots that suggest subsistence agricultural production within these communities. Although the number and size of colonial constructions within settlements is partly a function of the site's length of occupation, the correlation does not apply across settlement categories. The decreased presence of architecturally elaborate structures in *pueblos* and independent *ranchos,* regardless of their duration of occupation, suggests that architectural distribution indeed marks the division between the commercial and subsistence sectors and is related to the uneven expansion of the world-system in the region. Either the local elite manifested its connection to the regional center by imitating the Spanish architecture in Mérida, or the colonial administration imposed such expressions of control on the satellite communities. In either case, the architectural variability among the communities bespeaks differential integration.

House Lot Spatial Organization and Site Structure

Following the regional survey of communities listed on the *visitas pastorales* for Yaxcabá Parish, intensive archaeological survey was carried out at three sites, one from each settlement class: the *hacienda* Cetelac, the *pueblo* Mopila, and the independent *rancho* Cacalchen (Figure 7.1). Abandonment of all three sites coincided with the Caste War, but the length of colonial occupation at Mopila (1581-1847), was longer than at Cetelac (1773-1847) and Cacalchen (1750-1847). The *cabecera* was not included in the survey because the current occupation of the settlement has obscured most archaeological vestiges of the pre-Caste War period. In order to examine variation in settlement and site structure among communities, the sites were mapped in detail to reveal patterns of streets, house lots, features, plazas, and public architecture. Surface collection transects were placed within a small random sample of house lots at each site to examine patterns in the density and distribution of refuse discarded on the lot. The results of these investigations indicate how differences in archaeological site structure reflect differences in the settlements' articulation to the macroregional system.

A household is not an archaeological unit of analysis, and residential unit form (a spatial unit) does not closely correspond to household morphology (a social unit) (Hammel 1984; Netting et al. 1984; Wilk 1991; Wilk and Rathje 1982). This

apparent theoretical impasse for archaeologists can be partially resolved by defining households on the basis of "what they do," as a complex of adaptive strategies (Netting 1993; Wilk and Netting 1984; Wilk 1991). The definition provides archaeologists with a workable concept for investigating the relationships among production, labor organization, and site structure. In cases where the household, the activity group, can be securely linked to a focal point where coresidential activities are performed, such as a house lot or compound, archaeological site structural patterns should indicate adjustments to the productive strategies of households and communities. For all settlements in Yaxcabá Parish, the spatial unit that most closely corresponds to the household is the house lot.

Site structural analysis links relationships among artifacts, ecofacts, features, and structures to inferences of specific processes and behaviors responsible for spatial patterns (Binford 1987). Household change (i.e., transformation of the complex of adaptive strategies occurring within the coresidential unit) may be envisioned as occurring in three ways. First, productive activities may be added to the domestic economy. Second, productive activities may be eliminated from the complex of household activities. Third, the roles or proportions of various productive activities may change in relative importance to each other. Each of these possibilities requires some adjustment of household labor organization but may not necessarily produce any concomitant change in material culture or technology (Binford 1978, 1983). If variation in production organization is archaeologically recognizable, then site structural analysis can ultimately differentiate variation in the relations between centers and hinterlands within the world-system.

The economic reorganization of peripheries in the world-system affects, but does not determine, the household's organization of production and labor. Extraction of surplus value from peripheries is often achieved by provisioning households with items of non-local manufacture such as machetes, axes, or preciosities (Wilk 1981, 1991). Household participation within the larger economy, however, depends on its ability to allocate labor which conditions its response to supply and demand (Cook and Binford 1990; Little 1987; Wilk 1991). In the Yaxcabá region, house lot structure suggests that household adaptations vary according to disenfranchisement from land, the tax structure of the region, and the availability of credit. This variation is especially noticeable for one particular productive activity, raising small livestock. Similarly, the consumption of non-local products can indicate a community's degree of economic integration. In Yaxcabá Parish, the distribution of two non-local manufactures, metal and

glazed ceramics, can be compared to the settlement's economic position relative to the colonial system.

For the three sites intensively surveyed, two major differences in settlement patterns were noted: variation in house lot size and variation in the number of ancillary structures per house lot (Table 7.3). Average house lot size at Cetelac is much larger than at Mopila, which in turn is larger than at Cacalchen. The Kruskal Wallis test, a nonparametric comparison procedure, and nonparametric pairwise comparisons (Wilcoxon tests) indicate that the differences in mean house lot size are statistically significant between each of the three sites (Kruskal Wallis $|P|<0.002$; Wilcoxon $|P|<0.0001$ between Cetelac and Mopila; $|P|<0.0001$ between Cetelac and Cacalchen; $|P|<0.004$ between Mopila and Cacalchen).

With regard to the second pattern, different features were identified within the house lots. These included foundation braces of apsidal house structures, pig sties, chicken coops, *chich* (rock) piles and *arriates* (stone rings that protect tree roots), wells, and water control devices such as *pilas* (water storage tanks) and eras (irrigation berms). The numbers and diversity of ancillary features not used as dwellings demonstrate variation among the sites. Pig sties, chicken coops, and water control devices within individual house lots were more numerous at Cacalchen than at Mopila or Cetelac. A Kruskal Wallis test calculated for the mean number of ancillary features per house lot demonstrates a statistically significant difference among the sites ($|P|<0.027$). Wilcoxon tests show that the mean number of ancillary features per lot at Cacalchen is significantly higher than at Mopila ($|P|<0.019$), but no significant differences were found between Mopila and Cetelac ($|P|<0.999$) or between Cetelac and Cacalchen ($|P|<0.110$).

***Table 7.3**. Comparison of site population in 1828 (1), population density in 1828 (2), mean house lot size in square meters (3), and ancillary features per house lot (4).*

Site	1	2	3	4
Mopila	342	6.22	3,451	0.217
Cacalchen	634	18.11	2,770	0.645
Cetelac	51	1.28	6,110	0.346

The historical evidence suggests explanations for the two patterns. Both the population size and the rate of population growth were much higher at Cacalchen than at Mopila or Cetelac. Table 7.3 and Figure 7.3 show that the settlement containing the largest house lots correlates with the lowest population density, the lowest rate of population growth, and the smallest population. In contrast, the settlement with the smallest house lots has the highest population density, the greatest rate of population growth, and the largest population. At Cacalchen land stress was relatively high, because arable land needed for cultivation was limited by encroaching *haciendas* (BCCA 1845). Cacalchen house lots appear to have been subdivided when an additional residence was needed, providing a temporary solution for coping with rapid population growth within a circumscribed community. House lots at Mopila were not divided. Because land stress was less acute at Mopila, the increased population was probably accommodated by expanding the area of settlement. At Cetelac the large house lots and low population density suggest that the availability of residential space was not restricted.

The variation in the numbers of ancillary features may indicate different productive strategies and tactics intended to reduce risk of shortage. At Cacalchen the construction of permanent facilities for raising small livestock and for irrigation or water control in portions of the house lot suggests an intensification and diversification of house lot use which is less evident at Mopila and Cetelac. House lot gardening is a common form of agricultural intensification in tropical regions of Mesoamerica (Killion 1992). Intensive gardening or irrigation of a crop within the house lot during the dry season may also be used to hedge against a bad harvest. Raising small livestock, especially pigs, is often used as a source of emergency funds among the twentieth-century Maya (Hayden and Gargett 1990; Wilk 1991). The individual animals or their cooked meat may be sold locally

when households are in need of cash. Intensified house lot production seems to have occurred in the community least tied to the colonial economy, the independent *rancho,* whereas house lot production was not emphasized to the same degree in the *pueblo* or the *hacienda.*

Inhabitants of *pueblos* and *haciendas* probably had access to some forms of credit and opportunities for wage labor as a consequence of these settlements' close ties to the colonial economy (Granado Baeza 1845). In the late eighteenth century, small livestock raised by Indians was taxed by the Church as a tithe or *diezmo* (BCCA 1778). In *pueblo* communities which fell under parochial jurisdiction, livestock raising was probably common. Because intensively raising small livestock would have been noticed and taxed, however, it might have been a less attractive way of supplementing one's income or hedging against unforeseen risks. On *haciendas* the *diezmo* on small livestock was paid by the estate owner on behalf of his workers (AME 1787; BCCA 1778).

Independent *rancho* communities such as Cacalchen, on the other hand, were much less subject to parochial and civil oversight. Because these communities were only loosely integrated with the regional economy, sources of credit and wage labor would have been relatively scarce. Land stress was also a problem at Cacalchen. Under such conditions, intensification and diversification of production within house lots through gardening and raising small livestock might have been one of the few available options for coping with limited land and increased risk of subsistence shortage.

The surface collections from house lots at Mopila, Cacalchen, and Cetelac indicate consumption of two classes of non-local items, metal and glazed ceramics, that can be chronologically assigned to the late 1700s and early 1800s. Fragments of metal and glazed ceramics recovered in house lots refer to discard frequencies of these items (corresponding roughly to rates of consumption) and form part of the abandonment assemblages of the sites (see Deal 1985). Table 7.4 shows the distribution and relative proportion of these items among the sites. All areas designated A through M are house lots, except for area B/C which refers to the *planta* of Hacienda Cetelac, consisting of the main house, *noria,* kitchen, and outbuildings. Metal and glazed ceramics are present in greater frequencies in Mopila house lots than at the other two sites. Consumption of metal and ceramics among individual lots in Mopila also varies considerably. House lots in Cacalchen demonstrate low frequencies of non-local items in their assemblages, but there is less variation among individual house lots in the settlement than at Mopila. The low frequencies of glazed ceramics and metal in the *planta* of the hacienda is surprising, but the depositional context of several collection units in area B/C consists of roof fall from the main house which may partly account for the low

figures. House lots surrounding the *planta* of the estate, areas A and D, demonstrate the lowest consumption of metal and glazed ceramics of any house lots at the three sites.

Table 7.4*. Distribution of metal and glazed ceramics among house lots and sites.*

	Mopila	Cacalcen	Cetelac
	Area E	Area J	Area A
Metal	0.36	0.07	0.01
Ceramics	0.27	0.03	0.00
	Area F	Area K	Area B/C
Metal	0.56	0.17	0.07
Ceramics	0.48	0.03	0.15
	Area G	Area L	Area D
Metal	0.17	0.07	0.01
Ceramics	0.21	0.07	0.02
	Area H	Area M	
Metal	0.15	0.07	
Ceramics	0.20	0.00	
Total			
Metal	0.33	0.09	0.03
Ceramics	0.31	0.03	0.06

Note: All figures refer to the proportion of total collection squares in which metal artifacts or glazed ceramics were present.

This admittedly rough archaeological measure suggests that the consumption of non-local manufactures among communities in the Parish does not show a clear correspondence with the settlement's position in the colonial economy. Historical information demonstrates that inhabitants of Mopila were more active in the regional economy than those of Cacalchen, and consequently the archaeological evidence shows a greater presence of metal and glazed ceramics along with variation in the amounts of those items between households at Mopila. House lots and residential areas of *hacienda* dwellers, however, indicate a reduced frequency of non-local items, yet Cetelac was presumably integrated with the colonial economy to a far greater degree than either Mopila or Cacalchen. The *hacienda's* connections to the colonial economy should have facilitated access to products such as metal and glazed ceramics for the owner and his workers. Nevertheless, the permanent residents of Cetelac apparently did not consume these items in any greater quantities than independent *rancho* inhabitants, despite their advantageous access to land and credit.

The expansion of the world-system to Central Yucatan in the early nineteenth century, marked by the proliferation of cattle-raising estates, failed to completely disenfranchise rural households from means of production and to make wage labor the basis of household income. *Hacienda* expansion and the resulting stress on land resources resulted in two different solutions for rural inhabitants which prolonged and maintained the subsistence economy at the expense of the commercial sector. Rural communities either (1) legitimized the community's claim to land by agreeing to pay tribute to the Church and civil authorities, or (2) compensated for the loss of lands used for extensive cultivation by intensifying subsistence production on house lot gardens and raising small livestock within the settlement. Items of non-local manufacture were not consumed in great quantities in any of the settlements, but the archaeological evidence tentatively indicates that *pueblo* inhabitants may have been able to acquire these products in greater quantity than independent *rancho* or *hacienda* inhabitants.

In early nineteenth-century Yaxcabá Parish, the transition to a market-based economy failed. The protracted disputes over land initiated by *hacienda* expansion were interrupted by the Caste War of 1847. In the course of the conflict, many settlements were abandoned, and *haciendas* were destroyed. The first census following the Caste War in 1860 suggests that Yaxcabá Parish lost roughly 90 percent of its population to fighting, disease, and migration. Today inhabitants of the region still practice subsistence agriculture, apiculture, and small-scale stock raising. Craft specialization is minimal, and links to the

Mexican national economy are relatively weak. The *haciendas* of the early nineteenth century, destroyed or abandoned in the Caste War, currently comprise communal lands (*ejidos*) of *pueblo* and *rancho* settlements that have been reoccupied as the population recovered. The Caste War itself is viewed as the end of the *tiempo de esclavitud* (the time of slavery) and interpreted as a successful agrarian reform that restored the balance of land (cf. Bricker 1981; Sullivan 1989).

Conclusion

The expansion of the modern capitalist world-system is supposed to disenfranchise communities from subsistence production in peripheral areas such that they produce goods and services that are consumed by the system core. Conversely, secondary products manufactured in the core are distributed to and consumed by the periphery as a means of extracting surplus value from rural areas. The process of coreperiphery integration often results in loss of direct control over the means of production, and rural inhabitants may become dependent on institutions that extend credit to them in times of shortage. Ideally, basic household structure is changed and made more malleable so that it conforms to the capitalist demand for an unattached, mobile labor force that "materializes at the factory gates" when needed (Smith et al. 1984).

The archaeological and historical evidence from the *Parroquia de Yaxcabá* demonstrates that the process of world-system expansion affects the organization of labor and productive activities at the community and household levels in hinterland areas. These changes have archaeological consequences for the spatial organization of communities and residential units. Even subtle differences among hinterland settlements' degree of integration with the core may produce considerable site structural variation, as exemplified by the differences in community spatial organization of Cetelac, Cacalchen, and Mopila.

Of the three classes of archaeological data considered above, the distribution of colonial architecture shows the clearest correspondence to the community's degree of economic integration with the colonial regime. The distribution of metal artifacts and glazed ceramics within house lots, a rough measure of the consumption of non-local products by households in Mopila, Cacalchen, and Cetelac, demonstrates that the non-elite residents of *pueblo* communities generally had greater access to such items than did inhabitants of independent *ranchos* or *haciendas*. Even though *haciendas* were more closely integrated into the macroregional economy, the resident workers did not necessarily consume non-local manufactures in quantity.

House lot site structure at Cacalchen suggests a difference in the range of productive strategies practiced by households. Raising small livestock was probably a more intensive activity in independent *ranchos* than in haciendas and *pueblos*. The archaeological evidence suggests that households practicing diversified and intensified production tactics within the house lot, including raising small livestock, generally did not consume substantial amounts of non-local manufactures, metal artifacts and glazed ceramics. This observation strengthens the interpretation that intensified house lot production is a response to increased subsistence risk resulting from partial disenfranchisement from land. Intensified house lot production, especially raising pigs and chickens, probably represents a reorganization of household labor for coping with a risky economic climate of market expansion, but it does not necessarily indicate greater participation of these households in the emerging market economy.

Evidence from Yaxcabá is an example of how production changed in a region where the transition to a more diversified market economy was retarded. World-systems theory de-emphasizes cases where local autonomy in allocating social labor is successfully negotiated such that attempts to disenfranchise primary producers from the means of production meet with failure. The imposition of a model that stipulates the segregation of modes of production between cores and peripheries oversimplifies the complexity and variability of the local community's articulations with the macroregional system. Although there may be other colonial studies that demonstrate closer conformity with the world-systems model, the proposition that different modes of production become geographically segregated in macroregional systems is not unequivocally supported by cases from colonial period Yucatán.

Archaeological and anthropological investigations of production organization at the microlevel indicate that responses to capitalist expansion are variable (Wolf 1982). The idea that the integration of hinterland areas within macroregional systems (capitalist or otherwise) produces a concomitant and predictable transformation in the productive division of labor and degree of dependency between "core" and "periphery" is questionable—even within the original modern capitalist world-system itself. Applying a theory formulated on the basis of macrolevel historical data to microlevel anthropological studies becomes, in Wilk's (1991:25) words, "crippling when the unit of analysis becomes smaller and smaller." Although many of these problems have been circumvented by modifying world-systems theory for sociological and anthropological contexts, the variability in the organization of production at the microlevel has additional implications for the use of world-systems theory in archaeology.

Describing prehistoric and precapitalist macroregional interaction using a world-systems model applies a historical analogy to the archaeological record. As with any analogy, ethnographic, historical, or ethnoarchaeological, its use must be warranted. Arguments must develop links between the behavioral organization exhibited by the analogy and specific patterns of the archaeological record. Otherwise, the analogy becomes useless as a frame of reference for explaining the past. Because world-systems theory suffers from a lack of referents to larger processes that structure political economies (Price 1986), archaeological correlates that consistently reflect variation in the structure of core-periphery relations are difficult to identify. If the archaeological record of the modern capitalist world system indicates that articulations between cores and peripheries do not actually conform to the pattern originally proposed by the theory, it may be inappropriate to impose this aspect of the world-systems model as a frame of reference for understanding processes of core-periphery differentiation in the past.

Additional research at the microlevel should focus on the variability in household and community organization and its transformations under increasing and decreasing integration with macroregional political-economic systems. The archaeological correlates of processes that link centers and hinterlands need to be more thoroughly understood before we can apply world-systems theory as an explanation for macroregional organization. In some cases we may find that world-systems theory does not provide a satisfactory explanation of the way things operated in the past. Subsequent investigations should continue to yield better methods of archaeological inference that permit an understanding of center-hinterland relations as well as the process of capitalist development itself.

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8

Thoughts on the Periphery: The Ideological Consequences of Core/Periphery Relations

Patricia A. Urban and Edward M. Schortman

Introduction: Sources of Power

Discussions of core/periphery relations manifest broad anthropological concerns with questions of power, the ability to direct the actions of others (Balandier 1970). Crucial to these considerations are processes of political centralization, concentration of power in the hands of a single social faction (Bourdieu 1977; Giddens 1984; Roscoe 1993). Important in all centralization efforts is control over labor and the products it generates (Renfrew 1982; G. Webster 1990). Would-be rulers must develop sociopolitical structures by which they gain enduring, privileged claims to the labor of others. Egalitarian relations and exchanges are thereby converted into hierarchical ones that consistently benefit the ascending faction. That faction might act on regional or interregional scales, operating within the confines of a single polity or attempting to control the labor of occupants residing in other sociopolitical entities. In either case, the acquisition, defense, and extension of power is rarely a purely local matter. Modeling political centralization requires consideration of the complex interplay of regional and interregional processes in power contests of varying spatial scope. This essay begins with a brief overview of the ways in which the above goal can be accomplished, looking first at intra- and then at intersocietal political processes. These insights will subsequently be applied to the study of power relations within the Naco valley, in northwest Honduras, and across the broader interaction network in which prehistoric Naco was embedded.

Political centralization strategies succeed to the extent that one population segment monopolizes, or at least secures favored access to, material, social, and ideological resources needed by other segments to sustain themselves and reproduce the social order. Bonds of dependency thereby created give substance to distinctions between rulers and ruled and can be used to compel the latter to surrender labor, loyalty, and surplus to the former in “exchange” for essential,

centrally controlled goods and ideas (Duprey and Rey 1973; Ekholm 1972; Frankenstein and Rowlands 1978; Gailey and Patterson 1987:8-9; Gledhill 1978; Paynter and McGuire 1991:6-7, 10). Politics is, however, a contested arena in which moves to create monopolies are countered by struggles to maintain local autonomy through affirming control over resources (Bloch 1977a, 1977b; Brumfiel 1992; Certeau 1984; Douglass and Isherwood 1979; Gailey 1987; papers in McGuire and Paynter 1991). Political systems are dynamic fields where factions compete for dominance by mobilizing diverse assets within contending strategies.

Resources deployed in power struggles can be categorized in a variety of ways to advance analysis (see Giddens 1984; Mann 1986; Roscoe 1993; Runciman 1982; Yoffee 1985, 1991). We will employ four broad resource classes formed by the intersection of a variable's nature and place of origin. The first criterion is based on Gidden's distinction between allocative and authoritative resources (1984:258-261). The former encompasses material features of the environment, production technologies, and finished goods. Centralized control over such material conditions of life as irrigation water (Wittfogel 1957), subsistence goods exchange (Sanders 1956; Sanders and Price 1968), and/or land itself (G. Webster 1990) can be used as powerful levers with which to pry concessions from those dependent on elite "largesse" for their very survival (see also Gilman 1987).

Monopolies over allocative resources alone are insufficient foundations for maintaining durable patterns of domination and subordination (Balandier 1970; Bard 1992; Bourdieu 1977, 1990; Giddens 1984:38, 258-260; Kolata 1992:84-85; Runciman 1982; Yoffee 1985, 1991). Such asymmetrical relations must be written into the very fabric of existence to achieve an inevitability that precludes questioning. Dominant factions, or those aspiring to that position, must maneuver to define the very categories, structures, and relations of reality in such a way as to make the ruler's preeminence appear legitimate and immutable (Adams 1992; Bard 1992; C. Bell 1992; Bloch 1977a, 1977b; Bourdieu 1977:160-171, 1989, 1990:141; Cannadine 1987; Conrad and Demarest 1984; Gailey 1987:35; Kertzer 1988; B. Smith 1992). Elites seek, in Giddens' terms, to control authoritative resources, practices through which meaning is imposed on life and nature (1984:258-259). One of the most important authoritative resources in nonindustrialized societies is religious ritual (C. Bell 1992; Cannadine and Price 1987; Demarest and Conrad 1992; Kertzer 1988; Rappaport 1979). It is through these highly formalized behaviors related to the supernatural that people publicly create and reinforce basic premises, categories, and relations, all in a highly charged emotional setting that facilitates general acceptance of these beliefs and acquiescence in their inevitability (Bloch 1977a, 1977b; Dillehay 1990; Douglass

and Isherwood 1979:65; Geertz 1973b; Rappaport 1979). Centralized control over ritual enables one faction to define reality in ways suiting their parochial interests thereby protecting and, possibly, disguising the allocative bases of power. Authoritative and allocative resources are equally important in domination strategies; one is not simply a reflection of the other (Adams 1992:211; Bloch 1977a:108; Runciman 1982).

A resource's place of origin (i.e., whether it derives from within a society's boundaries or is imported) may also be significant in determining the outcome of power struggles. Exotic goods or ideas are more easily monopolized by a small faction than are local resources (e.g., Ekholm 1972, 1978; Friedman 1982; Friedman and Rowlands 1978; Wells 1980, 1984). Claims over the latter variables by extant social groups are not easily undercut without disenfranchising, and so severely disenchanting, potential followers (Santley and Alexander 1992; Spencer 1982). Imports, however, are not encumbered by local property rights and can be monopolized by those entrepreneurs who effectively mobilize to acquire them (Flannery 1968; Renfrew 1982). If one faction within a society can gain and keep exclusive access to the transactions through which foreign goods and ideas are secured then its members will enjoy a local monopoly over the use and distribution of exotic allocative and authoritative assets (e.g., Wells 1980, 1984). To the extent that non-local resources are needed and/or esteemed by the entire population, the monopolists are in a position to forge those dependency relations that are at the core of political centralization processes. The value of imports in the eyes of all members of a society may be enhanced by the association of exotics with distant realms that are themselves imbued with supernatural auras (Helms 1979, 1988, 1992). Equation of physical distance with sacred potency is widespread among non-Western peoples, imparting prestige and power to those who can acquire goods and ideas from remote areas. Such an association could only reinforce the political significance of imports.

Control over foreign allocative and authoritative resources alone provides a relatively unstable power base (Ekholm 1972; Friedman and Rowlands 1978; Gilman 1987; Kristiansen 1987:47; McGuire 1987:130-131, 1989:51). The continued flow of exotics is threatened by shifting alliances and animosities among exchange partners leading to unpredictable fluctuations in the availability of these resources. Social leaders are, therefore, motivated to supplement power based on import monopolies with claims on local authoritative and allocative resources. Enduring success in struggles to centralize power depends on the strategic manipulation of indigenous and foreign variables.

Despite the best efforts of paramounts, some allocative and authoritative assets (of local or foreign origin) remain at the disposal of subordinates who use them to

preserve some economic autonomy and to question the legitimacy of elite conceptual schemes (Abercrombie et al. 1980; Adams 1992; C. Bell 1992; Bloch 1977b; Bourdieu 1979:82, 1989:20-23; Certeau 1984; Gailey 1987; Giddens 1984:16; Kertzer 1988; Paynter and McGuire 1991; Roscoe 1993:115). The balance of power among factions in hierarchically organized societies may be stable over many years; the duration of political relations depends on paramount successes in implementing strategies that effectively control the widest range of foreign and local, authoritative and allocative resources. Such structures are never immutable. While the dominant maneuver to preserve power, the dominated remain alert to any opportunity to assert greater control over their own actions by severing dependency relations.

The above discussion suffers from the perennial archaeological problem of treating societies as isolable units within which political processes develop according to their own inner logics (see Wolf 1982 for a critique of such myopic views). While allowing for the passage of objects and concepts among territorial units, all consideration of the structural relations created by these exchanges has been avoided. One way out of this dilemma would be to adopt a variant of Wallerstein's world-systems theory (1974, 1980) to model linkages among spatially distinct political units (Algaze 1989, 1993; Blanton and Feinman 1984; Chase-Dunn and Hall 1991; Cunliffe 1988; Frank 1993; Feinman and Nicholas 1992; Kohls 1978, 1987, 1992; Pailes and Whitecotton 1979; Schneider 1977; Upham 1982, 1992; Whitecotton 1992). While differing considerably on how Wallerstein's account of capitalist expansion can be adapted to noncapitalist contexts, many scholars retain the basic premise that political processes in any society are shaped by that unit's structural position within an interaction network. Core states, the largest, most complex polities in the net, politically dominate smaller, more simply organized peripheral societies, extracting surplus from them through unequal exchange relations that disproportionately benefit core elites. Peripheries are economically impoverished as a consequence of interregional exploitation (Algaze 1993; Champion 1989:5-10, 14). Cores, in contrast, use imports from peripheries (usually raw materials) to sustain general economic growth and elevated consumption levels (Algaze 1989:572-573, 1993; Austen 1978:2; Frank 1993; Wells 1980, 1984). Peripheral political processes are undercut when core agents siphon off crucial resources that might have been employed in local power struggles. Core elites can use control over these assets to shore up power at home and establish intersocietal hegemonies. Political centralization now transcends the borders of any one polity.

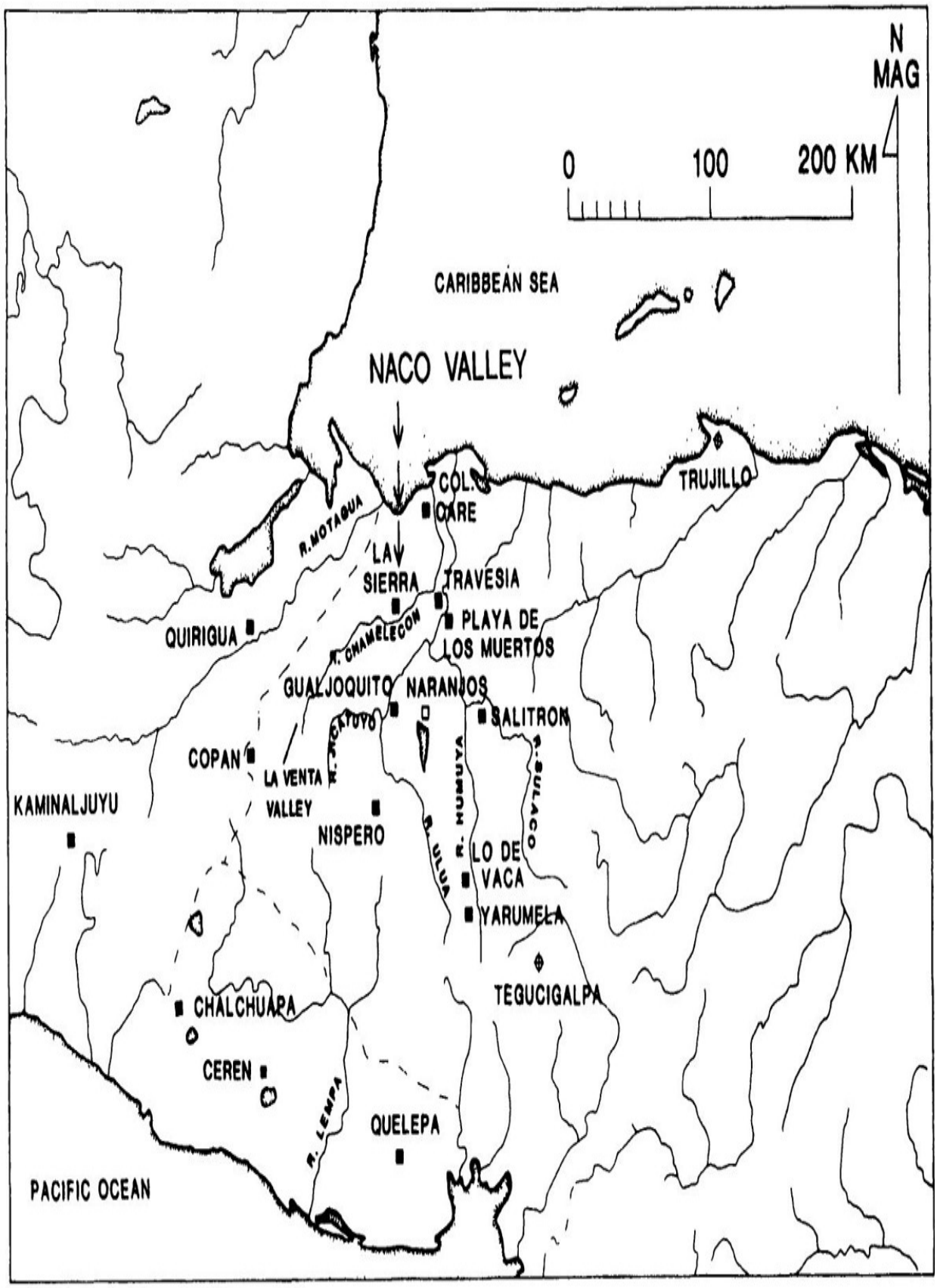
Debate concerning the applicability of core/periphery distinctions to ancient interaction networks has focused primarily on the likelihood that intersocietal

relations of dependence and underdevelopment could be created and sustained in the absence of capitalist structures and institutions (Chase-Dunn and Hall 1991; Kohl 1987, 1992; Schortman and Urban 1994; see also comments on Frank 1993). In the course of this discussion, intersocietal ties have come to be viewed largely through an economic lens. Questions of interregional dominance and autonomy tend to be inferred from patterns of goods exchange and the impact of such transactions on local political economies. The terms "core" and "periphery," therefore, preserve those materialist connotations with which they were originally charged in Wallerstein's formulation. We do not quibble with the importance of allocative resources in intra- or intersocietal power struggles. What makes us uncomfortable is restricting investigations of intersocietal structural relations to a narrow field of raw materials, finished goods, and production and transportation technologies. Just as authoritative resources play important roles in factional strife within polities they must be taken into account when modeling the dynamics of intersocietal contacts (see Kristiansen 1987). It is important to examine, therefore, the extent to which foreign ideologies were employed in local power contests and the impact the use of such resources had on shaping intersocietal political relations. The degree to which cores and peripheries defined by the movement of allocative and authoritative resources coincide is also worthy of scrutiny. This chapter constitutes a preliminary step towards addressing these issues.

The Naco Valley: Regional and Interregional Competition for Power

The Naco valley encompasses 96 km^2 of gently rolling terrain, 100-200 m above sea level (valley floor), bisected by the Rio Chamelecon, and bounded by the steep slopes of the Sierra de Omoa. Valley soils are relatively fertile and the zone sits astride several potential communication routes linking it with areas that supported prehistoric complex sociopolitical developments as shown in Figure 8.1: the Sula Plain, ca. 15 km east (Henderson ed. 1981; Joyce 1988, 1991); the middle Rio Ulua drainage, ca. 35 km south (Ashmore et al. 1987; Schortman et al. 1986); the lower Motagua valley, ca. 30 km west (Ashmore 1981; Schortman 1993; Sharer 1990); the La Venta and Florida valleys, ca. 65 km southwest (Nakamura et al. eds. 1992; Schortman and Nakamura 1992); and the lowland Maya center of Copan, ca. 115 km southwest (Baudez ed. 1983; Fash 1983; Sanders ed. 1986, 1990). Like much of southeast Mesoamerica (eastern Guatemala, western Honduras, and El Salvador), systematic archaeological investigations in Naco are of very recent vintage (see Healy 1984; Sheets 1984; and papers in Boone and Willey 1988; Robinson 1987; and Urban and Schortman 1986 for reviews of earlier work in southeastern Mesoamerica). Intensive study of Naco began in 1975 under the direction of J. Henderson (Henderson et al. 1979)

and has been continued by the authors during eight field seasons. During the course of this work a near-total ground survey of the valley and its immediate environs recorded 374 prehistoric loci (Figure 8.2), 49 of which, representing all known time periods and levels of complexity, have been excavated (343 structures exposed).


N
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0
100
200 KM
CARIBBEAN SEA
NACO VALLEY
TRUJILLO
COL.
CARE
R. MOTAGUA
LA
SIERRA
TRAVESIA
PLAYA DE
LOS MUERTOS
QUIRIGUA
R. CHAMELECON
GUALJOQUITO
NARANJOS
SALITRON
COPAN
R. AMARATUYO
LA VENTA
VALLEY
R. HUMUYA
R. ULUA
R. SULACO
KAMINALJUYU
NISPERO
LO DE
VACA
YARUMELA
TEGUCIGALPA
CHALCHUAPA
CEREN
R. LEMPA
QUELEPA
PACIFIC OCEAN

Figure 8.1. *Southeastern Mesoamerica showing some of the areas and sites mentioned in the text.*

This chapter is based on data gathered from 1977-1992 in the Naco Valley. During this span, approximately 8,000 m^2 of prehistoric deposits were excavated, most (ca. 7,100 m^2) pertaining to the Late Classic, the focus of this paper. Fully 259 Late Classic buildings have been tested in the course of the above work (13 percent of all constructions dated to this span). Investigations were conducted in all portions of the reconstructed La Sierra realm: 89 structures dug at La Sierra (19 percent of the edifices recorded for the capital, 2,729 m^2 cleared); 33 buildings excavated in La Sierra's near periphery, the densely settled area within a 1 km radius of the Late Classic center (13 percent of known Late Classic constructions in this zone, 1,151 m^2 cleared); 137 Late Classic edifices dug in rural portions of the La Sierra realm (ca. 11 percent of relevant constructions identified in segments of the valley outside a 1 km radius of the capital, 3,220 m^2 cleared). Additional work pursued during the 1995 and 1996 field seasons do not appear to challenge the interpretations advanced here. We are still in the process of evaluating these most recent findings, however, and the results are not included here.

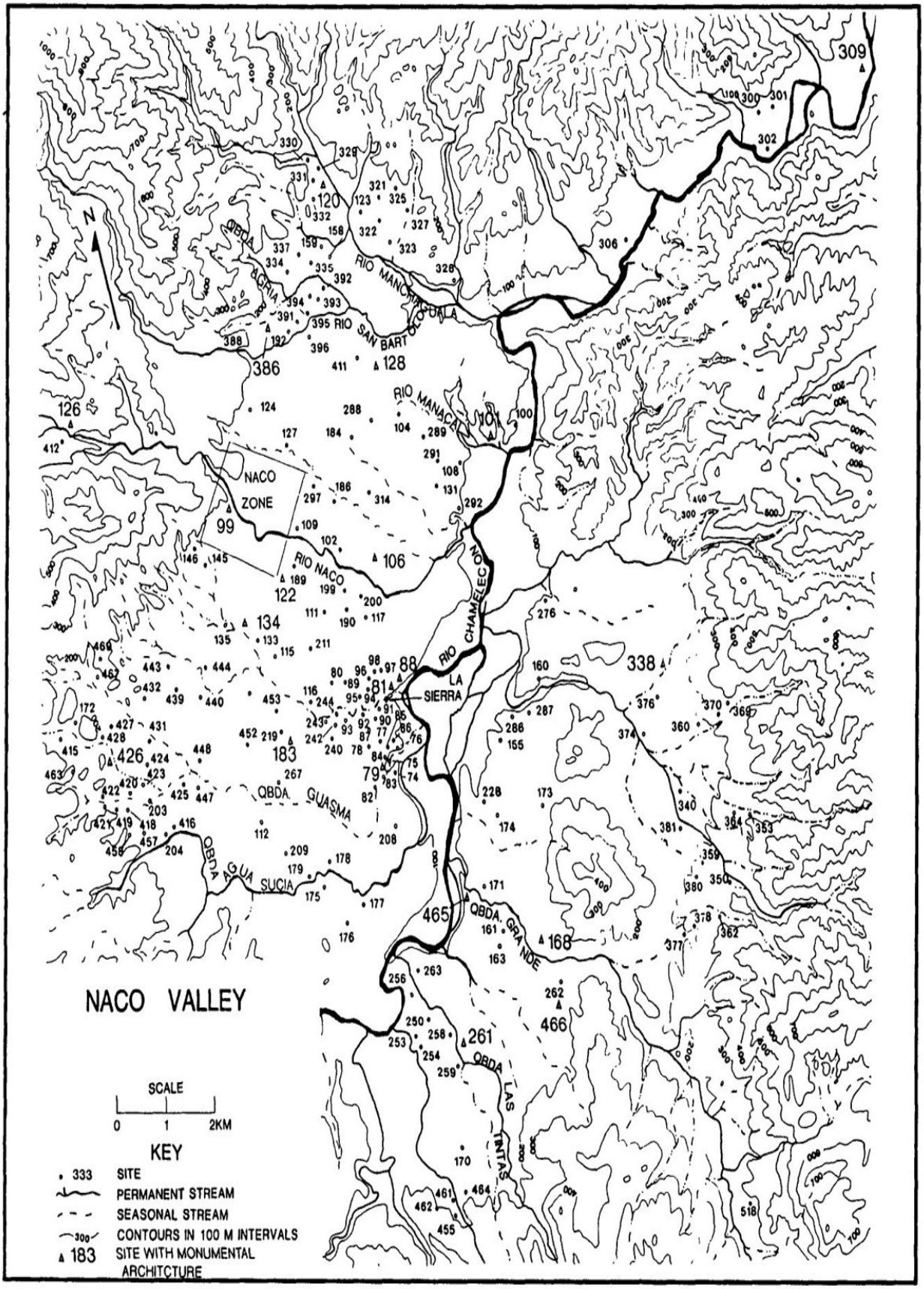
NACO VALLEY
N
NACO ZONE
RIO NACO
RIO MANACAL
RIO SAN BARTOLOMÉ
RIO CHAMELECON
QBDA. GUASMA
QBDA. AGUA SUCIA
QBDA. GRANDE
QBDA. LAS TINTAS
LA SIERRA
SCALE
0 1 2KM
KEY
333 SITE
PERMANENT STREAM
SEASONAL STREAM
300 CONTOURS IN 100 M INTERVALS
183 SITE WITH MONUMENTAL ARCHITCTURE

***Figure 8.2**. Archaeological sites identified in the Naco Valley.*

The occupation sequence reconstructed from these investigations extends from the Middle Preclassic (800-400 B.C.) to the Spanish Conquest in the sixteenth century A.D. (Schortman and Urban eds. 1991a, 1991b, 1994; Urban 1986a, 1986b; Urban et al. 1988; and Wonderley 1981 provide general reviews of past research and culture history). During this interval there were three periods of political centralization when the entire valley was incorporated within a single polity dominated by a major center. The most pronounced of these intervals was the Late Classic (A.D. 600-950) when La Sierra, with 468 surface-visible constructions crowded within 0.7km^2, was the regional capital. Valley populations also reached levels unmatched in earlier or later periods until the last 50 years.

The marked degree of Late Classic political centralization is reflected in the following measures: (1) A primate settlement system in which La Sierra is ten times the size of the next largest valley site; (2) settlement complexity, with La Sierra dominating a five-tier site hierarchy containing 17 subsidiary administrative centers with some monumental constructions (stone-faced platforms rising 1.5 m or higher); (3) concentration of monumental buildings at La Sierra where 37 large platforms define seven adjoining patios in the site core; (4) general population nucleation, with roughly one-third of all known Late Classic Naco buildings found at La Sierra and in a densely settled zone within a 1-km radius of the capital (the latter referred to here as La Sierra's near periphery). These measures together suggest that La Sierra's rulers successfully controlled labor and population through a complex administrative hierarchy. Concentration of population near the capital further implies that local paramounts acted effectively to minimize time and energy expended in supervising their subordinates all while denying commoner labor and surplus to secondary elites resident at some distance from the center (de Montmollin 1989; Roscoe 1993).

Evidence for a Late Classic Southeastern Mesoamerican World-System

Comparable sociopolitical and demographic florescences are noted throughout Late Classic Southeast Mesoamerica both in the environs of lowland Maya centers such as Copan and Quirigua (Ashmore 1984; Baudez ed. 1983; Fash 1983, 1988; Freter 1992; Sharer 1990; D. Webster 1992; D. Webster and Freter 1990) and among their "non-Maya" neighbors (see also Hirth et al. 1989; Urban

and Schortman 1988). This developmental coincidence implies that the polities in question were embedded within a network wherein shifts in one segment strongly affected changes experienced elsewhere. Such evidence of interlinked trajectories is commonly taken as symptomatic of common participation in a single world-system organized into a core and dependent peripheries along the lines noted above (Frank 1993). Extensive dispersal of shared artifactual and architectural styles along with traded items across southeastern Mesoamerica during the Late Classic also bespeaks close, persistent contact among participants in this interaction network (Urban and Schortman 1988).

The largest and most complexly organized Late Classic polities within Southeast Mesoamerica are those centered on Copan and Quirigua, ca. 115 km and 90 km distant from Naco, respectively. There is some evidence of direct allocative exchanges between Copan and Naco during the interval in question. Foreign obsidian comprises the vast majority of the Late Classic Naco lithic assemblage and 73 percent of the 55 sourced samples derive from the Ixtepeque flows (Bouey 1991). Copan's rulers apparently controlled access to this material within Southeast Mesoamerica (Sheets 1986), with Copanec agents most likely being responsible for the transfer of obsidian to Naco. Roughed out artifact blanks of marine shell may have passed to Copan in return. Three workshops yielding shell debris (mostly conch) along with sturdy-pointed, chert tools suitable for heavy cutting and engraving tasks were unearthed in the immediate environs of the La Sierra site core (Schafer 1990). No comparable production areas have been identified elsewhere in the valley and only one finished shell artifact has ever been recovered from excavated Late Classic Naco collections. The yield of this centrally controlled industry was most likely destined for export, probably to Copan where marine shell artifacts are reported from elite contexts and invested with considerable symbolic significance relating to rulership (Baudez 1989). The single shell workshop identified in the extensive Copan excavations is associated with only small quantities of debris, including conch, and no tools suitable for any task but the final transformation of blanks into finished artifacts (Randolph Widemer, personal communication, 1992). Marine shell apparently arrived at Copan after having undergone initial shaping elsewhere, La Sierra being a likely candidate for one such way station.

The Political Use of Allocative Resources

Exchange of obsidian and shell, two commodities with considerable significance in local political economies, seems to have tied Copan and Naco within a world-system in which the former was a core and the latter a periphery. These transactions were not asymmetrical, however, nor did they result in systematic intersocietal exploitation. If anything, the Late Classic in Naco marks an interval

of remarkable economic growth in which a large proportion of a rapidly expanding population was involved in a wide array of craft specialties (only two extensively excavated Late Classic residential groups in the La Sierra polity failed to yield evidence of craft manufacture; Schortman and Urban eds. 1994). La Sierra's rulers apparently moved to monopolize the fashioning of some generally needed goods using local (clay for incense burners and pottery vessels) and imported (polyhedral obsidian cores for blade production) allocative resources. Large workshops fabricating censers, ceramic containers, and obsidian blades are found almost exclusively at the capital while their products are distributed among all investigated domestic groups regardless of size. This pattern suggests general dependence on centralized production. Subordinates, in their turn, appear to have exploited what raw materials existed in the environs of their residences to manufacture goods to meet their own needs and, in some cases at least, to enhance their material statuses through generating surpluses exchanged with urban and rural Naco populations. For example, the large numbers of figurine, whistle, and ocarina (FWO) molds recovered at Sites 337 and 426 imply high volume production at these rural settlements. The result of such moves and countermoves was the limited advancement of political centralization by valley paramounts and the creation of a diverse economic system of full and part-time specialists totally out of keeping with the expectations of peripheral underdevelopment. Evidence for craft specialization at Late Classic Naco, in fact, exceeds that attested to at contemporary lowland Maya centers such as Copan and Quirigua (Ashmore 1981, 1988; Hendon 1991; Marcus 1983; Sanders and D. Webster 1988). Interactions and mutual influence are, therefore, indicated by the movement of allocative resources among polities but expected core/periphery structural relations are seemingly absent.

Investigations of the Naco Late Classic do not indicate that centralized control over basic subsistence resources played a major role in elite domination strategies. Specifically, La Sierra's rulers apparently did not enjoy favored access to arable land that could be translated into an advantage in local competitions involving food production. Soils near the capital were enriched by nutrients derived from floods of the three water courses that converge at this point (Anderson 1994). Nevertheless, the productive potential of La Sierra's fields was limited by high levels of free $CaCO_3$, salinity, and pH. Soils in other portions of the valley, especially those formed on limestone parent material in the south, equal or exceed the fertility of soils immediately accessible to the capital's residents (Anderson 1994). It is, of course, difficult to reconstruct prehistoric landholdings. Equating fields controlled by La Sierra's paramounts with those surrounding the capital is, undoubtedly, a gross oversimplification. Still, evidence

in hand does not indicate that La Sierra was established in an area of unusually rich agricultural land and does not support a model in which privileged control over arable soils figured prominently in strategies promoting political centralization. In fact, the major allocative resource found in La Sierra's environs is one that seems to have contributed to the local florescence of craft specialization. The extensive, high-quality clay deposit underlying and surrounding the capital supported and encouraged a ceramics industry that may have played a significant part in elite efforts to acquire and maintain power during the Late Classic (the pottery vessel and incense burner workshops noted above and in Table 1). Comparable clay strata are not known elsewhere in Naco and the single large-scale, commercial ceramics industry still operating in the valley relies on the exploitation of the La Sierra clays (in this case, to make roof tiles). Overall, craft specialization, employing local and foreign raw materials, seems to comprise the primary category of allocative resources employed in Naco's Late Classic political struggles.

Patterns of Ideological Interchange

Turning to an assessment of the specific contributions religious beliefs and practices made to Late Classic political struggles we come up against a major problem shared by all efforts to model prehistoric ideological systems: the translation of material patterns into conceptual schemes (Cowgill 1993; Marcus and Flannery 1994; see papers in Demarest and Conrad 1992). The interrelated system of ideas comprising a particular ideology can probably never be fully reconstructed without the aid of written records (Donley-Reid 1990). This problem is particularly acute in Southeast Mesoamerica where indigenous societies were decimated and severely dislocated by enslavement and disease immediately following the Spanish conquest (Chamberlain 1966; Newson 1981, 1986). There are, as a result, few ethnohistorical accounts and detailed ethnographic descriptions that can serve as reliable bases for interpreting prehistoric remains. Nevertheless, studies of spatial and temporal patterning among surviving materials can provide glimpses of past conceptual schemes. This is possible because artifacts, architectural features, and elements of site planning were themselves symbols with meanings for those who used them (Adams 1992; Ashmore 1991; Hodder 1986; Larick 1991). Material items are important parts of the symbolic structures that motivate and guide action (Bourdieu 1977; Hodder 1986; Keightley 1987). Conflicts over the definition of reality, therefore, often center on efforts to specify effectively the meaning of these material symbols for the populace-at-large (Beaudry et al. 1991; Bloch 1977a, 1977b; Bourdieu 1977, 1989; Douglass and Isherwood 1979; Paynter and McGuire 1991; Stern 1991).

Religious ritual frequently forms the arena in which a society's most potent symbols are manipulated, creating fundamental and encompassing concepts motivating the widest range of behavior (Geertz 1973b; Rappaport 1979). Surviving ritual materials, therefore, provide our best points of access into ancient belief systems and conflicts over their definition (Marcus and Flannery 1994).

The next perilous step made in this argument is specifying the data classes that presumably functioned as important ritual symbols in Late Classic Naco. These items include: *incensarios,* modeled ceramic effigies (figurines, whistles, and ocarinas), esoteric objects such as *Spondylus* shell and sculpture, special-purpose, non-residential buildings (especially monumental constructions identified by form criteria as "temples" [platforms with steep sides and small summits] and "ballcourts" [two long, parallel platforms]), along with specialized deposits such as caches and dedicatory burials. The importance of these materials in prehistoric southern Mesoamerican religious ceremonies has been established over the past century by ethnohistorical and ethnographic observations and archaeological contexts of recovery and associations (e.g., Benyo 1979; Morley et al. 1983; Schele and Miller 1986; papers in Scarborough and Wilcox 1991). Work conducted by the authors in Naco and in nearby areas has confirmed the ritual significance of the above items (Schortman 1993; Schortman and Urban eds. 1994; S. Smith 1988).

As noted previously, we do not believe it possible to reconstruct the precise meanings of these polysemous, dynamic symbols to the full spectrum of Late Classic Naco valley inhabitants (C. Bell 1992; Geertz 1973a; Kertzer 1988). We do assume, however, that religious belief systems are manifested by the manipulation of material symbols specific to those conceptual schemes. The past existence of different religious ideologies, their spatial extents, temporal durations, and associations with particular social strata can therefore be reconstructed by examining the patterned distribution of the items through which these ideologies were expressed. Comparative stylistic analyses of material symbols may also cast light on the origins of the ideas these objects conveyed (autochthonous or foreign). We also presume that the intensity of religious devotions conducted in a particular area correlates in a very general way with the density of ritual objects recovered from excavated contexts in that locale. Though the original meanings of material symbols may always elude us, it is possible to discern the organization of, and sources of inspiration for, ancient religious devotions by examining the distribution of objects and constructions that functioned in those rites.

There seem to have been at least two distinct ritual systems linked with different social strata in the Late Classic Naco valley. The first has a long history

of continuous local development and is associated with commoners and secondary elites (those notables residing outside the La Sierra site core). Paraphernalia of this cult is found at all extensively cleared Late Classic sites and consists of FWOs and relatively simple incense burners in ladle, prong, and scored lid forms (E. Bell 1991: Figures 4 and 5). These data categories are linked in contemporary southeastern Mesoamerica with small-scale devotions performed by and for individual domestic units residing in patio-focused structure groups (i.e., households). The above interpretation is borne out by the low densities in which these materials are recovered from Late Classic deposits outside the La Sierra site core (censers are found at rates of 0.1-1.1 pieces per excavated m^2, FWOs at 0.03-1.0 piece per excavated m^2; see also, Benyo 1979; Schortman 1993; S. Smith 1988). Special-purpose ritual constructions are not an integral part of this religious system.

The second conceptual scheme is manifest through a series of material symbols localized within the La Sierra site core. Diagnostics of this cult are elaborately modeled censers, *Spondylus* bivalves (intact as well as burnt and shattered fragments), defaced and broken sculpture, distinctive temple forms, and a ballcourt (Structures [Strs.] 1A-50 and 51). These artifacts and features derive primarily from the most inaccessible portion of the core, the far west, where six sizable temples (Strs. 1A-12 through 17) are located along with the largest single collection of ritual objects ever recovered in the Naco valley, a one meter thick deposit uncovered in Op. 37 between Strs. 1A-16 and 1A-17. This feature consisted of a very dense concentration of *incensarios* (11.6 pieces per excavated m^2, primarily modeled examples), *Spondylus* shells, sculpture fragments, a cache of seven small ceramic cups, and imported greenstone artifacts, buried in part by white ash. Temples and ballcourt at La Sierra are further distinguished by the use of cut stone masonry in at least parts of their facings (Naco structures of all sizes are almost invariably faced with unmodified stones). All of these elements have been linked elsewhere in southeastern Mesoamerica with public religious observances pursued on a grand scale for the benefit of large social units, sometimes entire polities (Benyo 1979; Freidel 1992; Schele and Miller 1986; Schortman 1993). This collection of material symbols is as restricted in time as it is in space within the valley, being confined solely to the Late Classic. That La Sierra's paramounts controlled the performance of public rites is suggested both by the location of the relevant materials within the site core surrounded by upper class residences and the recovery of elite power symbols, including a portrait tenoned sculpture of a presumed ruler, in the Op. 37 deposit. Rituals carried out in the La Sierra core seem, therefore, to have differed significantly in kind and scale

from those pursued elsewhere in the valley and to have been a paramount monopoly.

Control over these religious practices may have helped legitimize claims to political preeminence by one faction in the La Sierra polity. By exclusively performing rites with broad significance for all valley residents, La Sierra's rulers might have been perceived as spiritually privileged and potent. At the very least, subordinates of all ranks would have been dependent on paramounts for the conduct of large-scale devotions (Balandier 1970:38, 40, 101-102; Kertzer 1988:116-117; Kristiansen 1982:265; Mann 1986:22-23; Swartz et al. 1966:9-11). Staging public rituals in the western site core, where the action was framed by some of the largest Late Classic Naco constructions, provided a dramatic context enhancing the perceived power of both rite and elite celebrant. Finally, rituals using modeled censers, esoteric paraphernalia, and unique building forms may have helped create and reinforce solidarity within the ruling group. Shared participation in such devotions linked paramounts into a ritual community, reinforcing their unity and accentuating their separation from other valley residents (Abercrombie et al. 1980:3, 157; C. Bell 1992:190).

Paramount success in monopolizing and imposing a ritual system may have derived in part from the source of that ideology's inspiration. At least some components of the La Sierra elite belief system originated in lowland Maya elite ideologies, especially those practiced at Copan. Evidence for this assertion lies in similarities between: (1) stylistic elements on modeled censers from both areas (especially the use of cacao pod effigies pendant from censer rims); (2) headdress styles represented in sculpture (the turban adorning the La Sierra tenon portrait seems to be a simplified version of those worn by Copanec lords); (3) details of ritual practice (especially the use of *Spondylus* and the intentional defacing of the tenoned head [other sculpture was also fragmented] that hint at the conduct of termination rites similar to those attested to in the Maya lowlands [Schele and Freidel 1990]); (4) ballcourt arrangements with alleys aligned roughly north-south and backed on the south by terraced eminences. The foreign source of at least some components of La Sierra's elite ideology would have made these ideas a resource easily monopolized by Naco magnates who controlled extra-valley contacts. Such exotic and high-prestige origins may have also leant the belief system an aura of potency encouraging at least partial acceptance by members of the La Sierra polity (Helms 1979, 1988, 1992). Relations of domination and subordination embedded within and legitimized by lowland Maya elite religious symbols might have also provided a blueprint for novel hierarchical relations unavailable in the Naco tradition (Freidel 1992). This is not to say that Copanec beliefs were fully comprehended by their borrowers or, if understood, adopted

without modifications (Thomas 1992). Components of lowland Maya elite ideologies are absent from the La Sierra polity, for example those expressed through hieroglyphic inscriptions. The central point here is that the exotic source of La Sierra paramount religious practices made them an attractive and monopolizable resource useful in local power contests.

The premises embodied in this ideology might have commanded respect and some acceptance from subordinates but this is not the same as positing wholesale acceptance of an elite-sponsored symbolic system (see Certeau 1984). Practice of other rituals, using different material symbols, throughout the valley points to the persistence of an alternative cosmology that could have served as a basis for questioning elite religious monopolies (e.g., Borhegyi 1970). At the very least, widespread participation in the household-based ritual system would have asserted the continuing ability of domestic groups to maintain their own access to the supernatural, denying absolute dependence on elite beliefs and practices. Recovery of small numbers of lid, prong, and ladle *incensarios* along with FWOs in the Op. 37 deposit at La Sierra may hint at efforts to coopt the competition by linking it to the dominant ideology (ladle, prong, and scored lid *incensarios* are found in densities of 0.3-1.3 pieces per excavated m^2 in Op. 37 while the same deposit yields 0.2 of a piece of FWOs per excavated m^2).

That La Sierra's dominant ideology existed in uneasy harmony with the older, domestic religious system(s) is suggested by the former's ultimate failure at the end of the Late Classic. Paraphernalia associated with the elite cult disappears from the record at this time while objects integral to Late Classic domestic rites persist at least through the Terminal Classic (A.D. 950-1100). More dramatic is the systematic dismantling of the ballcourt and at least portions of two excavated temples (Strs. 1A-14 and 16) at or near the conclusion of the Late Classic. Cut blocks and circular ballcourt markers were removed from these buildings and apparently reused in Terminal Classic constructions throughout La Sierra. Collapse of the La Sierra belief system may have been precipitated by disintegration of centralized elite power at Copan in the early ninth century A.D. (Fash and Stuart 1991; D. Webster 1992), an event that might have called into question the tenets of a conceptual scheme linked with powerful rulers at the latter center (see also Renfrew 1982).

The above reconstruction posits: (1) The existence of at least two conceptual schemes in the Late Classic Naco valley, associated with different social strata and only imperfectly integrated; (2) That the dominant ideology was actualized in rituals conducted solely by paramounts in the La Sierra site core employing distinctive material symbols some of which were of foreign (Copanec) derivation; (3) The subordinate cosmology was widespread throughout the valley and used

symbols with deep roots in Naco; (4) That the two putative cosmologies existed in dynamic tension, La Sierra's dominant ideology ultimately losing acceptance at the end of the Late Classic, possibly following the "collapse" of its inspiration in the Copan valley. These tentatively discerned material shifts reflect a volatile pattern of ritual practice spanning 350 years during which time various factions created and used artifacts and architecture to negotiate their positions in sociopolitical hierarchies.

Discussion: World-Systems Revisited

Current evidence suggests that Late Classic Naco was an "ideological periphery" of lowland Maya core states, particularly Copan. Passage of ritual paraphernalia and belief systems was not reciprocal. Ideological innovations and their material correlates emanated from Copan (and, possibly, Quirigua) but symbolic elements originating in Naco and other southeastern Mesoamerican societies were not adopted by lowland Maya rulers. Magnates at Copan seem to have enjoyed a "prestige advantage" over neighboring polities that encouraged emulation.

This is not the same as saying that La Sierra's rulers were passive recipients of core innovations. Naco paramounts, instead, exercised a good deal of freedom in selecting those aspects of lowland Maya conceptual schemes that best suited their parochial interests. Foreign ideas and sacred paraphernalia were incorporated within strategies calculated to enhance the power of La Sierra's scions vis-à-vis other factions within the Naco valley. Manipulation of material symbols clearly linked to distant potentates imbued Naco rulers with whatever prestige and supernatural auras were associated with those remote realms. Apical elite monopolies over these symbols within the La Sierra polity differentiated rulers from their subordinates who could not partake of the former's charisma. Lowland Maya models of political centralization, articulated and legitimized through religious ritual, may also have provided enterprising Naqueños with a blueprint and rationale for domination lacking local precedents (see also Flannery 1968).

The discussion up to this point is based on the assumption that dispersal of lowland Maya elite beliefs and practices resulted from voluntary adoptions free of external coercion. We reject, therefore, the notion that the material patterns described above reflect the expansion of a Copanec conquest state rationalized by religion (see Conrad and Demarest 1984). Spread of the lowland Maya belief system through military action seems unlikely on several counts. Material effects of warfare, such as fortifications and interments displaying signs of violence (e.g., skeletons with mortal wounds and/or associated with weapons), are not much in evidence within Late Classic Naco. La Sierra's location on level terrain near the valley's center, in fact, seems designed more to enhance access than to promote

defense. Further, the amount of power exercised by La Sierra's rulers appears much greater than what would be permitted if Naco was a subjugated province. Finally, what evidence we have concerning warfare in Late Classic southeastern Mesoamerica suggests that no polity, not even the relatively large Copan and Quirigua states, was capable of exerting a significant military threat over distances exceeding 50 km. Most of the data relevant to military activities in the Late Classic southeast come from recently deciphered hieroglyphic texts that highlight the relative instability and weakness of conquest states in the area, e.g., the successful revolt of Quirigua against Copanec control in A.D. 737 (Marcus 1976; Sharer 1990). The above arguments are not conclusive. Available evidence does at least tentatively indicate, however, that religious concepts and practices passed freely among interacting elites in Late Classic southeastern Mesoamerica. The choice of what elements to accept or reject seems to have been based largely on local decisions affected by political calculations.

Ideologies stressing and rationalizing hierarchical social distinctions have, in fact, frequently appealed to emergent elites who actively encouraged the acceptance of such belief systems in efforts to shore up claims to regional preeminence. The rapid dissemination of Hinduism through much of coastal southeast Asia during the fifth to seventh centuries A.D. and Catholicism within early Medieval Europe was encouraged, in part, by the appeal these hierarchical belief systems held for local rulers (Hall 1985:6, 71-72; Havlick 1989; Sawyer 1979; Trigger 1978; Wolters 1967:246-247). Both doctrines supported unequal power distributions with control vested in the hands of an anointed monarch whose right to rule ultimately derived from divine sources (Hall 1985:6, 71-72; Havlick 1989; Sawyer 1979; Trigger 1978; Wolters 1967:246-247). Hinduism and Catholicism were also linked in the eyes of their converts to distant, high-prestige realms. Handling of foreign symbols by local elites transmitted some of the sacredness associated with these fabled lands to indigenous rulers (see also, Algaze 1989:585; Helms 1979, 1988, 1992; Oates 1993).

While acceptance of at least aspects of lowland Maya elite ideologies benefitted La Sierra's rulers, there is some reason to believe that dissemination of their ritual system was to the advantage of Copanec lords. We called attention earlier to evidence of commodity exchange between Copan and Naco paramounts. These important transactions were most likely conducted via personalistic ties predicated on the participants sharing a symbol system (Schortman 1989; Schortman and Nakamura 1992; Schortman and Urban 1987, 1992). People so linked can establish bonds of trust essential to enduring goods exchange and communicate with and understand each other with relative ease. Extensive exchange networks are, therefore, frequently underlain by and depend

on commonly held symbolic, especially religious, systems (e.g., Abu-Lughod 1989:16-17; Austen 1978:7; Cohen 1969; Curtin 1975, 1984; Donley 1982; Hall 1985:36-38; Santley et al. 1987; Schortman 1989; Schortman and Urban 1987, 1992). Partial adoption of lowland Maya religious beliefs and ritual practices served the interests of donor and recipient if only because it facilitated intersocietal transactions important to both political economies. The Late Classic southeastern Mesoamerican world-system was, to some extent, held together by a conceptual scheme linking the primary interactors, core and peripheral elites.

The one-way flow of ideological innovations, from core to periphery, may reflect the high esteem in which the largest, most complexly organized polities in the network were held. It may also have resulted from the calculated efforts of peripheral scions to conceptualize and legitimize novel hierarchical relations by adopting sacred rationales developed earlier and successfully for these purposes within the core. Whatever the case, it does not appear that the ideological edge held by lowland Maya notables translated into an economic advantage in the intersocietal transfer of allocative resources. As noted earlier, Naco looks like anything but an underdeveloped periphery systematically pillaged for Copan's benefit. Authoritative and allocative variables apparently moved freely through the Late Classic southeastern Mesoamerican world-system and were used as resources in local power struggles. These ties did *not*, however, create the sorts of structural relations characteristic of the modern world-system in which core rulers enrich themselves at the expense of their peripheral neighbors.

The reasons for this lack of fit between the expectations of core/periphery models and the southeastern Mesoamerican case are undoubtedly diverse and complex. We have argued elsewhere (Schortman and Urban 1994) that the inability of lowland Maya elites to monopolize the production and distribution of goods needed throughout the world-system or to mount an effective military threat against even their close neighbors denied them the opportunity to dictate terms of interpolity exchange to their advantage (see also Austen 1978; Chase-Dunn and Hall 1991; Kohl 1987, 1992). Interpolity transactions were, therefore, conducted on a more or less equal footing among all participants and may have stimulated economic development and associated political centralization processes in cores and peripheries alike. Copan might have had the honor of providing the symbolic framework within which cross-border communication occurred and goods changed hands. It was an honor, however, that was not allowed to interfere with local political and economic growth.

The southeastern Mesoamerican world-system was, in fact, most likely characterized by a number of mutually interacting cores (such as Copan and Naco) each of which exploited a limited periphery, its own immediate hinterland,

for support. The failure of any one of these units to establish enduring economic, ideological, and political domination over its associates may well have contributed to network instability. No one core possessed a sufficiently large periphery the exploitation of which yielded resources capable of supporting sustained economic, political, and demographic expansion. Lacking direct (through conquest) and indirect control (through intersocietal monopolies over production and transportation technologies) over their interaction partners, core elites were forced into relations of mutual dependence. Creation and maintenance of personalistic ties linking paramounts throughout southeastern Mesoamerica, ties underwritten by shared ideologies, were essential to the passage of resources needed to define and reproduce hierarchies in any one polity. However successful these interelite relations may have been they lacked the reliability of direct or indirect exploitation. Sociopolitical power founded, at least in part, on material and ideological resources obtained from neighboring elites was always vulnerable to any of a wide range of factors that might affect the willingness or ability of those rulers to contribute needed assets.

Beginning by ca. A.D. 800 some southeastern Mesoamerican cores began to disappear from the network, reducing the flow of crucial ideological and material resources on which elite preeminence was based. Paramount power was compromised and sociopolitical hierarchies were correspondingly simplified in a number of southeastern polities, including Naco, over the period A.D. 800-1100. Changed conditions of interaction opened the door for those who had been underlings to sever their reliance on elite monopolies. Leaders and followers in Naco seem to have existed in uneasy harmony even during periods of maximum political centralization. As conditions changed within the southeastern Mesoamerican world-system at the end of the Classic, this tentative accord was shattered as the downtrodden took advantage of new opportunities to assert political, economic, and ideological autonomy. Consequent political decentralization in Naco, occurring from A.D. 950-1100, was not inevitable but a result of shifting fortunes in an ongoing political battle that was never permanently resolved. This message must have been forcibly brought home to all parties when those monumental symbols of paramount power, the La Sierra ballcourt and temples, were plundered of their distinctive faced masonry and circular markers at the close of the Late Classic. The irony that these stones were recycled to build the residences of those who formerly served La Sierra's masters must not have been lost on anyone present.

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9

Rethinking World-Systems: Power, Distance, and Diasporas in the Dynamics of Interregional Interaction

Gil J. Stein

Introduction

In the last twenty years, world-systems theory has become one of the most common frameworks used by historians and social scientists to account for the political economy of complex societies. The world-system model emphasizes the role of long-distance exchange dominated by highly centralized core areas as the main factor explaining both the organization of less complex neighboring polities and trajectories of developmental change. The classic and defining example of a world-system is the extension of European colonial control over Africa and the Americas from the sixteenth century to the present.

The model certainly has explanatory power for at least some cases. However, researchers have applied the world-system concept on every continent of the globe to an extremely broad range of noncapitalist societies at virtually every conceivable scale and level of complexity ranging from the relations between the Roman empire and "Barbarian" northern Europe down to small scale Native American groups in California. In some cases, the applications of world-systems have reached ridiculous extremes; for example, one researcher states that "there is no type of society in any period of human existence in which world-systems relationships do not affect its structure and dynamics" (Collins 1992:373). In other words, everything is, and always has been, part of a world-system.

I think that this is a mistake. By applying the world-systems construct so broadly and uncritically, we are forcing a variety of interactional forms and developmental trajectories into a single theoretical procrustean bed. In this paper I suggest that both the original form and subsequent modifications of the world-system construct distort our understanding of developmental change in ancient societies for two main reasons: First, they overemphasize the role of external dynamics—such as long-distance trade and the dominant role of the core—while ignoring or minimizing internal dynamics in the so-called "periphery"; and

second, world-systems coreperiphery relationships form only one modality within a much broader range of potential economic relations between regions. Instead of subsuming all interaction within the world-systems framework, we must develop models that strike a balance between the recognition that no society can be understood in complete isolation from its neighbors, and the assumption that contact with the outside is the main factor explaining that society's development.

We must recognize that core-controlled long-distance exchange systems of the world-system variety are just one pole in a continuum of possible economic and political relations between regions. The extent to which a core area can influence the development of neighboring regions is mediated by factors such as transportation economics, technological differences, the organization of production, the balance of military power, and the relationship between ideology and sociopolitical organization in both the core and the periphery. In many cases, the polities of the periphery can set the terms of interregional interaction to their own advantage, even when dealing with a more socially complex state society in a core region. Because the rules of the interregional game can vary so widely, we cannot simply assume that every network of connections between societies forms a world-system. Instead, we need a more flexible perspective that incorporates both the internal dynamics of the political economy in the peripheral polity and the external dynamics of contact with neighboring societies into a model that allows for a range of different forms of inter-regional interaction. This perspective should also specify the variables that shape the organization of interaction between societies at different levels of sociocultural complexity.

In this discussion, I focus on exchange as the most common and probably most influential form of interregional interaction. This paper has two parts. In the first section, I present a critique of the world-systems model as originally developed by Wallerstein and as modified more recently by researchers concerned with its cross cultural applicability. In the second part, I outline the Distance-Parity model and the Trade Diaspora model as two complementary analytical frameworks that avoid some of the main pitfalls of the world-systems construct by stressing the internal dynamics of the so called "peripheries" in interregional exchange networks.

World-Systems

Wallerstein's World-Systems Model

Although the world-systems construct has evolved considerably since its initial formulation (Wallerstein 1974a), virtually all applications of the model to

historical and archaeological cases share three main assumptions: (1) that the core dominates the periphery through some combination of military, technological, or organizational superiority; (2) that the core controls an asymmetric long-distance exchange system with the periphery; and (3) that changes in the organization of long-distance exchange structure all other aspects of political economy in the polities of the periphery.

A series of critiques by historians, sociologists, economists, and anthropologists provide compelling arguments that these three assumptions are highly questionable for world-systems in general, for many archaeologically known interaction systems, and even for sixteenth century Europe, the type-case on which the model is founded. These assumptions eliminate or minimize the roles of locally based agency by polities or groups in the periphery, local production and local exchange, and internal dynamics of developmental change.

The assumption of core dominance forms an essential element of the world-system model: political structures of the two poles of the world-system are viewed as so closely tied that the strengthening of state structure in the core "has as its direct counterpart the decline of the state machineries in peripheral areas" (Champion 1989:6; Martin 1994:154; Nash 1981:401; Wallerstein 1974b:403, 1975:23). Core dominance is generally assumed to be grounded in technological and organizational advantages over a less advanced periphery. While these factors certainly contributed to western ascendancy over Africa and Asia in the late nineteenth century, this was not the case for the first two centuries of the European expansion in these areas. In fact, the long-term technological advantages enjoyed by Europe in the last century may well be the exception, rather than the rule in the history of interregional interaction. This is especially true for the ancient world, where archaeologists such as Philip Kohl have shown that Bronze Age southwest Asia was characterized by multiple overlapping cores, and by an ease of technology transfer that made it difficult for a single core area to maintain its dominance over a given periphery (Kohl 1989).

From an anthropological perspective, the most serious theoretical flaw in the world-systems model lies in the fact that the assumption of core dominance denies any kind of agency to the periphery. The peoples of the periphery are treated as the passive victims of the core's dynamic expansion (Nash 1981:398; Sahlins 1994:412; Schortman and Urban 1994:402; Wolf 1982:23). This derives directly from the explicit economic determinism of the world-systems model. Wallerstein defines cultures as: "the ways in which people clothe their politico-economic interests and drives in order to express them, hide them, extend them in space and time, and preserve their memory" (Wallerstein 1980:65; Sahlins 1994:413). Cultures (and especially the cultures of the periphery) are thus seen as

economically determined entities whose structure and ideological content are the products of their being part of the core-dominated world system (Wallerstein 1983:76). Ironically, as Marshall Sahlins points out, in denying agency to the colonized and peripheral cultures, "world-system theory becomes the superstructural expression of the very imperialism it despises" (Sahlins 1994:412-13).

The ethnographic and ethnohistoric record clearly refutes the idea of a passive periphery, showing instead that the specific effects of external forces from the core vary widely because they are mediated differentially through local ideologies. Peripheral culture and preexisting political economy therefore play extremely important roles in determining the nature of interregional exchange.

Marshall Sahlins shows the systemic importance of local cultural schemes through a comparative study of China and Hawaii's diametrically opposed reactions to western attempts at commercial penetration in the eighteenth and nineteenth centuries (Sahlins 1994). Although regular western trade with China began as early as the sixteenth century, the Middle Kingdom had virtually no interest in European manufactured goods. This trade was based on England's enormous demand for tea, which at that point could only be obtained from China. However, China had no demand for England's primary exports, and instead preferred silver in exchange for this commodity. As a result, the terms of trade vastly favored the Chinese "periphery." This indifference toward western trade goods stemmed both from the Chinese world view, and from the highly centralized political economy in which trade was controlled by the Manchu emperor.

The Chinese considered themselves the one civilized nation in the world, and viewed the Europeans as barbarians. As part of this world view, the Manchu emperors perceived the British trade missions not as offers of commercial relations between equal powers, but rather as the rendering of tribute by a culturally and politically inferior group; in offering gifts to the royal court, the barbarians were "turning toward civilization" (Sahlins 1994:420). The more exotic the tribute, the better, because having a variety of unusual goods from different countries (publicly displayed in royal pavilions) provided visible proof of the emperor's mastery of the world. Once the trade missions had presented their gifts, as far as the emperor was concerned, the tribute had been rendered and the intercultural transaction was complete; no additional goods of that sort were needed or even desired.

In contrast with the Chinese disdain for European goods, the chiefly elites of Hawaii had an almost insatiable craving for western industrial products. North American merchants, with less access to silver than their English competitors,

found that they could obtain tea from China in exchange for Hawaiian sandalwood (used for incense). The American traders concluded trade agreements with the Hawaiian elites in which fancy textiles, furniture, and other western manufactured goods were exchanged for large amounts of sandalwood. Sahlins suggests that the Hawaiian demand for western products stemmed from a combination of ideological factors and the sociopolitical organization of the islands at the time of western contact (Sahlins 1990).

Unlike the Chinese, the Hawaiians did not view the Europeans and Americans as barbarians from the ends of the earth. Instead, the westerners were seen as the "bearers of powers civilizing and divine" (Sahlins 1994:430). As a result, the chiefly lineages of Hawaii were quite receptive not only to western goods, but were eager to take on many aspects of Euro-American identity, since they equated it with high status and divine grace.

The Hawaiians' desire for western industrial goods stemmed not only from their cultural construction of Euro-Americans, but also from their sociopolitical organization at the time of contact. In contrast with China, which was at that time a highly centralized state under the control of one emperor, the Hawaiian islands were politically divided into a number of rival chiefly kin groups, each vying with the others for wealth, status, and power. Competition between these elite groups led to a tremendous demand for western luxury goods because these were considered high status goods from the lands of the gods; their Hawaiian possessors could then increase their own status relative to other lineages in a classic case of competitive emulation "between the powers that be and the powers that would-be" (Sahlins 1994:434). Driven by the imperatives of political rivalry, the Hawaiian chiefs were soon obligating themselves to supply more sandalwood than they could actually harvest, in return for manufactured products which could be cheaply produced and supplied by the American traders. The latter were then able to convert these favorable terms of trade to their advantage, and soon came to dominate the Hawaiian islands.

The contrasting examples of China and Hawaii emphasize several key problems with the world-systems model's universal assumption of the dominant core and its corollary of the passive periphery. First, in the case of China, the European core was unable to dominate its trading partner for nearly three centuries. Second, local ideologies and local political economy play key roles in determining the nature of interregional interaction; this is the exact reverse of the world-systems model's structural logic. Finally, the periphery must be seen as an active agent whose contact with the core can vary from eager demand for trade to indifference to active resistance.

Closely tied to the assumption of core dominance are the ideas that (1) relations between the core and periphery are inherently exploitative and (2) that this core-controlled unequal exchange system structures the political economy of polities in the periphery. The world-system model asserts that the powerful core states exercise hegemony over the rest of the world-system and are able to extract large scale surpluses through their control over asymmetrical terms of trade. Drawing on a concept from dependency theory (Emmanuel 1972; Frank 1966, 1967), Wallerstein argues that "Once we get a difference in the strength of the state-machineries, we get the operation of 'unequal exchange' which is enforced by strong states on weak ones, by core states on peripheral areas" (Wallerstein 1974b:401). The interregional specialization of labor in an asymmetrical exchange system under core control is seen as the key factor that creates and maintains a dependent political economy in the periphery. In short, the model views interregional exchange within a world-system as a "zero-sum" game, in which the core's gain must be the periphery's loss (Sella 1977:31). This perspective overlooks the other two very plausible alternatives —(1) that the exchange may be mutually profitable for both polities, or (2) that the periphery may be the polity that profits most if the core's demand for imports exceeds the periphery's demand for exchange goods.

The key issue here is not whether exchange takes place between the core and periphery, but rather the degree to which this trade transforms local political economy. One can only say that this kind of systemic integration has taken place when the volume of trade reaches a sufficiently high level to transform peripheral production into an export-oriented system (Goody 1971:278; Nash 1981:398). Although it is certainly true in some cases, there is little evidence to support the idea that interregional exchange is the general explanation for sociopolitical change in the periphery (Lane 1976:529; Curtin 1984:9). In assigning to interregional interaction the decisive transformative role, the world-systems model ignores the less visible, but, in the long run, far more important endogenous changes in domestic production, investment, and consumption (Sella 1977:31).

The Modified World-Systems "Perspective"

In short, world-systems assumptions of core dominance, asymmetric exchange, and interregional trade as the determinant of peripheral political economy are both problematical on theoretical grounds, and are also contradicted by historical case studies. This calls into question the extent to which the model can be used to describe and explain pre- or noncapitalist systems of interregional interaction. Recognizing many of these difficulties, Chase-Dunn and Hall have recently

suggested a number of modifications in the world-systems model in an effort to make it cross-culturally applicable to the numerous world-systems which they contend have existed over the past 10,000 years (Chase-Dunn 1992, 1993). To extend the world-system model this widely requires them to relax a number of key assumptions in Wallerstein's formulation. Along with Schneider (Schneider 1977), Abu Lughod (Abu Lughod 1989, 1990; Lane 1976), and many archaeologists, Chase-Dunn and Hall do not limit world-systems to capitalist societies. Instead, drawing on Eric Wolf (1982) they suggest that these networks can operate under a variety of "systems logics" or "modes of production": the "kin-ordered or kinship mode," the "tributary mode" (characteristic of early states), the "capitalist mode," and a theoretical "socialist mode" (Chase-Dunn 1992). Chase-Dunn and Hall argue that it is not necessary to limit the world-systems to complex societies; instead they argue that the only cases which are *not* world-systems are interregional interaction networks where all groups are nomads (Chase-Dunn and Hall 1993 :855). Similarly, noting the variation in potential modes of interaction in the system, they argue that the core-periphery distinction and the idea of core dominance are not necessary for a world system. As part of rejecting the necessity for the core-periphery distinction, Chase-Dunn and Hall argue that it is also not necessary to assume the axial division of labor, which associates the core with free labor and production of finished goods and the periphery with coerced labor for the extraction of staples/raw materials (Chase-Dunn and Hall 1993:856, 862-3). Chase-Dunn and Hall suggest that interaction between societies need not be limited to the bulk trade; instead, prestige goods exchange, regularized warfare, political symbolism, political protection, are all forms of regularized contact that can define a world-system.

After relaxing these key assumptions, the only parts of Wallerstein's model retained in this reformulation are the multiple-group composition and the focus on cross-cultural interaction (of whatever sort) as a key element accounting for the development and functioning of individual societies within the world-system (Chase-Dunn and Hall 1993:855). Note that even in this revised form, external dynamics predominate: "we claim that the fundamental unit of social change is the world-system, not the society" (Chase-Dunn and Hall 1993:851).

Chase-Dunn and Hall point out many problems with the world-systems model and accurately specify many of the assumptions that need to be dropped in order to allow for cross-cultural analyses. However, in attempting to generalize the applicability of the model while retaining its original terminology, they have eliminated its specificity as an explanatory construct and reduced the term "world-system" into little more than a shorthand for "interregional interaction system." Recognizing the extent of this modification, Chase-Dunn and Hall

describe their analytical framework as a world-systems "perspective" meant to be used as a heuristic device for cross-cultural comparison, rather than a world-systems "model" for use as a rigorous explanatory construct (Hall and Chase-Dunn 1993:121).

Summary: Problematic Aspects of World-Systems

In its original form, the three assumptions of Wallerstein's world-systems model (core dominance, asymmetric exchange, and long distance exchange as the prime mover of social change) simply do not work, and have had to be discarded by the vast majority of people who have attempted to apply the model to pre- or noncapitalist societies. Attempts to modify Wallerstein's model by relaxing most of its main assumptions are equally problematical for two reasons. First, the construct becomes so broad and amorphous that it loses any kind of analytical power, except as a generalized philosophical outlook. However, when virtually every multigroup interaction network is called a "world-system," then the term becomes meaningless. Second, even in its modified form, the world-systems construct still views the external dynamic of interregional interaction as the main structuring element at both the local and macroregional level. As a result, despite its explicit recognition that peripheral polities can be important in the overall scheme of things, the modified world-systems perspective continues to minimize the roles of agency and internal dynamics in these "peripheries" since the causes of change are always situated somewhere on the outside.

Basically, if we retain world-systems as our exclusive framework for studying interregional interaction, then we are stuck with an epistemological Hobson's choice: If we adhere to Wallerstein's original construct, then we have a model which has clear assumptions and an explicit core-dominant view of the world, but simply does not work for pre- or noncapitalist societies. On the other hand, if we embrace the modified world-systems perspective, then we have a construct that gains broad cross-cultural applicability to virtually all interregional networks everywhere, but does so by sacrificing all analytical specificity about how these systems actually work.

Toward an Alternative Paradigm

These are not the only two options open to us. Once we recognize these problems with the world-system construct, it becomes possible to derive alternative analytical frameworks for intersocietal interaction. I suggest that any such paradigm, and the models it generates, should be based on four principles. First, it must recognize the importance of interregional interaction in the development of social complexity, but without automatically conceding to it the primary causal

role. Second, the paradigm should explicitly focus not only on the broader scale of the interaction network, but also on the local level of the individual polity to identify recurring organizational modalities and processes of change. Third, the paradigm should explicitly de-emphasize the systemic structure of interregional interaction networks as some kind of integrated entity. Instead, we should allow for models that emphasize organizational dynamics rather than structure. Such an approach treats the organization of interregional interaction as the observed outcome of short-term decision making by multiple individuals and institutions with different, overlapping, and often conflicting goals (e.g., Brumfiel 1992; Brumfiel and Fox 1994; Mann 1986; Stein 1994). This organizational flexibility (or free-for-all) allows for the roles of individual agency and multiple forms of social identity as key factors affecting political economy and developmental trajectories not only individually in the "core" and the "periphery," but also in the interaction between the two regions. In other words, we should stop assuming a priori that world-systems are systems. Finally, the paradigm should allow for a "two-track" epistemology which identifies the cross-culturally applicable mechanisms and processes that structure interregional interaction, while at the same time recognizing the culturally specific forms and historical trajectories that these interaction networks may take in a given group of interacting polities. The culturally unique expressions of these more general mechanisms and processes can be seen as deriving from a combination of specific ideologies, environmental context (e.g., the distribution of natural resources and the geography of transport), the history of the system, and the random element of chance.

Working with this set of general principles, if we treat the three key assumptions of the world-systems model as hypotheses to be tested, rather than as established facts, then it becomes possible to construct alternative models to describe and explain interregional interaction among complex polities. Instead of concentrating on system structure, it makes much more sense to focus on the ways that the different forms of power—political, ideological, economic, and military—are distributed over the social landscape. This approach provides a much clearer view of the dynamics of interaction—specifically, how interregional networks function and change over time.

Power and Its Limits in Interregional Interaction

The concept of power is critical to understanding interregional interaction. Following Mann, we can define power as "the ability to pursue and attain goals through mastery of one's environment" (Mann 1986:6). Resources are the media through which power is exercised. Thus, although power is a very abstract, volatile, and fluid phenomenon, it can be studied through an analysis of its

sources, media, and effects. Our concern here will be with the logistics of exercising and projecting power in economic, military, and political relationships across space in the different parts of an interregional exchange system. Core areas are rarely if ever able to monopolize power. At the same time, even the strongest cores face systematic, predictable limits on their ability to project power across large distances. As a result, power is distributed, however unevenly, across the social landscape. The balance of power among the different institutional actors is one of the most important factors affecting the organization of interregional exchange networks. In contrast with the world-systems view of power as a unitary, essentially economic phenomenon exercised only by core areas, the approach taken here focuses on cores, peripheries, and communities involved in exchange as three distinct organizational foci, each of which can exercise differing forms and degrees of power. The combined outcome of these intersecting and conflicting uses of power forms the observed patterning that we call an interregional exchange network.

A number of environmental and social factors facilitate or limit the exercise of power in economic, political, and military relationships. The distribution of natural resources is a fundamental factor in economic power, whether the resources are agricultural land, pasture, forests, mineral wealth, or control over critical communications routes such as mountain passes, rivers, or harbors. Resource differentials between regions are often (although not always) a key impetus to the development of exchange systems. However, the mere fact that a region may have a resource that other regions want does not, in and of itself, mean that the producing region will be able to exercise a dominant role in an exchange system. If multiple sources of raw materials or finished products exist, then the consuming polity has a range of choices which free it from dependence on a single supplier.

A second critical factor in the interregional balance of power is the demographic composition of the different polities. Large populations generate high levels of demand for resources; this translates into intensified local production and higher levels of exchange. Populous polities are often characterized by higher levels of regional integration and sociocultural complexity relative to more sparsely populated areas. Finally, large populations can field larger military forces if necessary. Overall, a large population can wield significantly greater economic, political, and coercive power than less populous regions. At the same time, demographic advantages can be offset by disease (see e.g., Cook 1981; Crosby 1986; Dobyns 1983; Ramenofsky 1987). Thus, the endemic diseases of West Africa limited European colonial penetration for several centuries in a barrier so effective that the Guinea coast was widely known as “the

White Man's Grave." This disease-based power balance lasted until the Europeans developed techniques for the mass production of quinine and effective protocols for its use as malaria prophylaxis (Headrick 1981).

Available technology forms a third important factor in the balance of power between regions in an interregional exchange system. Technological advantages were certainly crucial in the nineteenth-century colonial expansion of Europe into Africa and Asia (Headrick 1981). Technology comprises not just the physical tools and techniques used to manipulate or transform matter, information and energy, but also the organizational structure through which these processes take place. As such, technology—especially its organizational component—is deeply embedded in culture (Lechtman 1977; Pfaffenberger 1992). Interregional differences in productive technology can give one region a competitive advantage by allowing it to manufacture goods or raise crops more cheaply or efficiently than its neighbors. Differences in military technology can allow a region with a better armed, better organized force to dominate neighboring areas. Differences in transportation technology can translate into power disparities if one polity can move trade goods or troops more cheaply, quickly, or efficiently than its neighbors. Although, as Kohl has pointed out (Kohl 1987, 1989), technology appears to have been easily transferable between different regions in the ancient world, the most mobile aspects would appear to have been tools and techniques, rather than organizational forms. Because the latter are so embedded in cultural value systems, they are often difficult to assimilate into the preexisting social and cultural schemata of the borrowing polity. As a result, even if the material aspects of a given technology are shared by two regions, differences in the organizational contexts of those technologies can perpetuate power imbalances.

Sociopolitical organization forms the fourth main factor contributing to the inter-regional balance of power. Complex, stratified, and highly integrated societies can mobilize and deploy resources at a larger scale and for longer periods of time than less centralized polities. This does not mean that more complex polities are inevitably more powerful than their less complex neighbors; several structural and cultural factors can mitigate the benefits of complexity. The high levels of integration and specialization in complex, stratified polities make them more vulnerable to any perturbation which destroys or damages a critical part of the system (Adams 1978; Flannery 1972). Similarly, internal divisions and competition can weaken or constrain the power of even highly complex polities.

Taken together, resource distribution, demography, technology, and sociopolitical organization form the main bases for power disparities among polities in an inter-regional interaction network. However, it is one thing to wield

great military, political, or economic power at home. It is quite another matter to project this power across space to influence or dominate another polity.

A number of factors limit the exercise of power and level the playing field in inter-regional interaction. Multiple supply sources can eliminate the competitive advantage enjoyed by a region that has a resource desired by other polities in the network. Endemic disease can nullify the demographic power of a populous polity. Technological advantages may evaporate due to the ease with which tools, techniques, and even organizational structures can be transferred from one region to another. The tremendous economic and military power that can be mobilized by highly complex polities is often offset by either factionalism or the vulnerability of these hypercoherent systems to the destruction of structurally critical subsystems.

However, the single major limit on the ability of a complex "core" polity to exercise military, economic, or political power over other regions is the cost of transportation, or what Paul Bairoch has called "the tyranny of distance" (Bairoch 1988:11). Transportation costs have a tremendous effect on the content, volume, and organization of exchange. These costs are structured by a combination of interrelated variables including transportation technology, distance, environmentally determined conditions of accessibility, the weight/bulk of the freight, and the costs of protection against armed violence (Drennan 1984; Hassig 1985; Lane 1966). These factors define the amount of time needed to get from one place to another, and the amount of freight that can be carried. The distance between two regions is a fixed variable, as are environmentally determined conditions of accessibility such as rivers, seas, mountain passes, or swamps. The time and cost needed to surmount these obstacles depends on the available technologies of transport.

Under preindustrial conditions, transport costs structure the organization of exchange and tribute so that the predominant exchange goods shift from bulk to luxury items once a certain distance threshold is reached. Based on transport costs, Drennan argues that for Mesoamerica, at least, overland transport of staples such as maize was limited to relatively short distances around consuming centers such as Tenochtitlan; long-distance trade and tribute would have been limited to luxury goods such as cacao, turquoise, shell, copper, gold, and especially textiles due to their high ratio of value relative to weight or bulk (Drennan 1984; Cowgill 1993). Mesoamerica is to some extent an unusual case because the absence of domesticated pack animals required that all transportation be carried out by human muscle power —either as overland bearers or as paddlers in riverine transportation. However, even in Andean America, where llamas provided efficient animal traction, Inca tributary systems show the same shift from the

mobilization of bulk food items (staple finance) in subject areas close to the capital toward the use of luxury or prestige goods (wealth finance) in more distant subject areas (D'Altroy and Earle 1985). Maritime transport provides the only real exception to this principle. However, in all other cases the high transport costs for bulk items generally limited long-distance transportation by land or river routes (especially upstream) to relatively small volumes of high value goods (Cipolla 1967:57).

It is important to note that this distance-related shift from large volumes of bulk goods to small volumes of high value goods is connected not just with trade, but with broader aspects of political economy too, as can be seen in the spatial variation in Aztec and Inca tribute. Transportation costs limit not only the movement of goods but of people as well, whether those people are traders, administrators, soldiers, or colonists. The "tyranny of distance" thus acts as a limiting factor on the exercise of economic, political, and military power in interregional interaction, for even the most powerful of preindustrial "core" states.

The relationship between power and distance in interregional interaction can be seen clearly in two cases of failed efforts at colonial expansion. The world-systems model implicitly assumes that core areas successfully exercise hegemony over peripheries due to their ability to project their power across large distances, through a combination of advanced technology and superior organization. However, this assumption fails to take into account the levelling effects of distance. In an insightful analysis of two unsuccessful medieval European colonial enterprises—the Crusades (ca. A.D. 1099-1300) and the Norse Vinland settlement in Newfoundland (ca. A.D. 1000)—Crosby argues that these efforts failed for two reasons (Crosby 1986). First, the colonists had no real technological advantage over the local people. In the case of the Vinland colony, Crosby notes that when one compares the effect on impact of a Norse iron tipped arrow with that of a Native American chipped stone arrowhead, it is the proverbial distinction without a difference. By the same token, the military technologies of the Crusaders and their Saracen foes were quite evenly matched; if anything, the Muslims held the advantage with materials such as Damascus steel. Second, Crosby suggests that, in the absence of a clear technological advantage, distance can work as a great equalizer. Simply put, power decays with distance. The distances from the homeland to the colonized area were so great that neither the Norse nor the Crusaders were ever able to bring to bear enough military force to establish themselves among the locals (Fitzhugh 1985b:28).

The Crusaders succeeded initially in establishing the Latin Kingdom of Jerusalem due to a combination of generous support from the European homeland

and factionalism among the local Muslim states. However, the Crusader states never became self-sustaining. Because the Franks refused to form long lasting alliances with local Muslim polities or even with eastern Christian groups, they could only survive through the continuous infusion of European reinforcements and financial support. This required not only ideological commitment, but also a struggle against tremendous logistical barriers. European nautical technology was never sufficiently developed to transport large armies to the Levant and keep them supplied. It is highly significant that large Crusader armies had to march overland, usually suffering tremendous losses, on the way to the Holy Land, rather than going by sea. Crosby argues that the inadequacy of European transport discouraged the kinds of mass migration from Western Europe that would have been necessary in order to sustain the Crusader states and insure their viability. As a result, the Crusaders were always a besieged minority that was never able to offset the numerical advantage of the populous local Muslim states. The combination of distance, inadequate technology, insufficient population, and waning ideological commitment proved fatal. After an initial surge, European support diminished and finally ended, so that the Crusader states progressively weakened and eventually collapsed in the face of counterattacks by the local Muslim forces under Saladin and later Baibars.

Overall, it is clear that one cannot understand interregional interaction without a clear picture of the determinants of power relationships and their distribution across the social landscape. The remainder of this paper outlines two models that allow us to account for variation in the power relations of the different parts of a multipolity network: the Distance-Parity model (Stein 1993; 1998), and the Trade Diaspora model (Cohen 1969, 1971; Curtin 1984). The two are complementary in that they deal with the same general class of problems while working at different scales of analysis. The Distance-Parity model is a more general construct that specifies the variables that structure power relations and the form of interaction at the regional level, i.e., between polities. By contrast, the Trade Diaspora model is a more specific construct which focuses on one of the main forms of interregional interaction—exchange, specifically exchange where people from one culture are physically present in the territory of the other. Instead of looking at the level of polities, the Trade Diaspora model focuses on the variables structuring the relations among the participants—the individuals and groups who actually make up the network: traders, host communities, and homelands. This “bottom-up” perspective highlights the ways in which the different goals, power balances, and social strategies of traders and host communities affect the organization of the interregional network as a whole.

Both the Distance-Parity and Trade Diaspora models recognize variability in the relations between different components of interregional interaction networks while attempting to specify the determinants of this variability. Both models involve the analysis of power relations, without assuming dominance by any one part of the network. Finally, these two complementary approaches share a recognition that the internal dynamics of local social organization in the "periphery" have a tremendous effect on the functioning and evolution of multipolity networks.

The Distance-Parity Model of Interregional Interaction

The Distance-Parity interaction model was formulated in an attempt to understand the organization of the world's earliest known colonial network, established in Syria and Anatolia by the city states of Mesopotamia during the fourth millennium B.C. (Stein 1993; 1998). This model suggests that the core's ability to exercise hegemonic power decays with distance, thereby leading to increasing parity or symmetry in economic and political relations with increasingly distant peripheries. Under these conditions, core-periphery interaction is expected to be limited in scale and influence such that the peripheral political economies do not necessarily develop the specialized dependency relations predicted by the world-system model. The emergence of asymmetric interregional dependency relationships is thus something to be demonstrated, and not simply assumed in advance. In this formulation, the critical variables which structure variability in the organization of interregional exchange are: (1) the balance of power between polities (cf. Schortman and Urban 1994); (2) the effects of distance on transport costs for both military force and trade goods; (3) the degree of difference between regions in access to military, productive, and transport technology (Kohl 1987, 1989); and (4) demographic/ecological conditions such as population size, differential resource distributions, and the nature of endemic diseases in each region (Crosby 1986; Fitzhugh 1985a).

Under preindustrial conditions, transport costs structure the organization of exchange and tribute so that the predominant exchange goods shift from bulk to luxury items once a certain distance threshhold is reached (Cowgill 1993; D'Altroy and Earle 1985). Transportation costs also limit the ability to project military power over large distances, leading to clear distance-related differences in the ways that even highly militarized core areas deal with increasingly distant peripheries (Smith 1986).

Variables such as the interregional balance of power and transportation costs can be combined into the following Distance-Parity model: Under conditions of

technological and demographic parity between two regions at different levels of sociocultural complexity, the power of the more developed ("core") region will decay with distance, leading to

1. A decline in core control over interregional exchange, causing a shift from asymmetric to increasingly symmetric conditions of exchange between the two areas.

2. A progressive reduction in the importance of long distance exchange relative to local exchange and subsistence production in the political economy of the periphery.

3. A progressive reduction in the exchange of bulk goods relative to the proportion of prestige goods due to the latter's high ratio of value to bulk/weight.

4. A progressive reduction in economic pressures/incentives toward the specialized production of surplus craft or subsistence goods for export.

5. A progressive restriction of core influence to peripheral elites, rather than the peripheral population as a whole.

6. Increasing restriction of the ability of the core to project military, economic, and political power into the periphery. Schortman and Urban (1994:402) have pointed out that these different forms of power need not have coterminous distributions in space. We can therefore suggest that the core's ideological power will be much less subject to this distance-decay function since it has the highest ratio of "value" to bulk/weight. However, the presence in peripheries of core ideologies and prestige goods will increasingly be subject to appropriation and transformation into the local cultural idiom (see e.g., Moorey 1987; Thomas 1991); as a result, the presence of core-produced prestige goods in these areas need not imply core dominance over local elites in the periphery.

7. A progressive decline in the degree to which interregional interaction affects the organization and development of political systems in the periphery.

The degree of core dominance, the extent of core control over the exchange system, and the effect of interregional exchange on the structure of peripheral polities are all highly variable. Under conditions of technological/demographic superiority or ease of access between two areas of differential social complexity, asymmetric core-periphery systems can develop along exactly the lines specified by Wallerstein in the world-systems model. Thus, empires as generally defined (see e.g., Sinopoli 1994) often have modes of interregional interaction that correspond closely to Wallerstein's "world empire" type of world-system. However, when these conditions do *not* obtain, then we would expect to see increasing parity with distance in core-periphery relations. The Distance-Parity

model should be widely applicable to a variety of noncapitalist networks of multipolity interaction. I have argued elsewhere that the model provides an archaeologically testable framework for the analysis of interregional interaction in ancient complex societies (Stein 1993, 1998). Distance-parity dynamics apparently limited the interregional exercise of economic and military power in a variety of historic and prehistoric settings, including Postclassic Mesoamerica (Hassig 1985; Smith 1986), the sixteenth- and seventeenth-century trade between Spain and the Americas (Macleod 1984), the Roman Empire (Hedeager 1987), and the "Uruk expansion" of Late Chalcolithic Mesopotamia.

Trade Diasporas and the Organization of Interregional Exchange Networks

How do interregional exchange systems actually function when factors such as distance create an essential parity in power relations between cores and distant peripheries? The Distance-Parity model takes a large scale view, focusing on the level of the polities involved. The Trade Diaspora model described below provides a complementary perspective by focusing on the actual participants in exchange networks. This bottom-up perspective has two advantages: first, it allows us to recognize tremendous variation in the organization of exchange; second, a focus on trade diasporas shows that this variation in exchange organization is best understood by looking at internal dynamics and competition within the so called "peripheral" areas, rather than assuming a priori that external factors explain the structure of the network.

Exchange is one of the most common and important forms of interregional interaction. Trade across cultural boundaries is risky business, requiring highly specialized skills, and the ability to function within the value systems of two distinct societies (Yambert 1981:174). Direct exchange between producers and consumers can take place at the boundary between two groups. However, as the network of interacting societies grows in scale and complexity, these activities increasingly become the domain of specialized intermediaries who travel between regions or take up residence in the foreign community with whom they trade.

We have already noted how the world-systems model views interregional exchange as (1) controlled by the core, and (2) the prime mover of sociopolitical change in peripheral economies. While there can be no doubt of the potential importance of exchange in the development of complex societies (see e.g., Adams 1974), we must allow for the role of endogenous social processes in both the core and the periphery as factors affecting the overall organization of the network. It is also necessary to remember that cores do not always dominate interregional

interaction. The assumption of core control over exchange derives from a generalization of the relations between Europe and the African or Asian countries over which it exercised economic and political hegemony during the eighteenth and nineteenth centuries. When one examines precapitalist or non-Western exchange networks, it becomes apparent that there is a wide range of variation in the structure of relationships among the two poles of the exchange system and the specialists who act as intermediaries between them.

One of the most useful ways to recognize this variation in the social context of interregional exchange is the concept of the "trade diaspora," developed by Abner Cohen in an effort to understand the relations between ethnically distinct enclaves of Hausa traders and their Yoruba host communities in Nigeria and neighboring regions of West Africa (Cohen 1969, 1971; Curtin 1984). Cohen defines trade diasporas as interregional exchange networks composed of spatially dispersed specialized merchant groups which are culturally distinct, organizationally cohesive, and socially independent from their host communities while maintaining a high level of economic and social ties with related communities who define themselves in terms of the same general cultural identity (Cohen 1971:266-267). Trade diasporas arise in an ethnically heterogeneous social landscape where culturally distinct groups are engaged in exchange under conditions where communication and transportation are difficult, and where centralized state institutions are not effective in providing either physical or economic security to participants in long distance exchanges. One entrepreneurial strategy through which these difficulties can be overcome is for traders from one cohesive ethnic group to control all or most of the stages of trade in specific commodities. To do so effectively, the group must organize itself as a corporate entity capable of political action which can deal with external pressure from their host community or trading partners, ensure unified group action for common causes, and establish channels of communication and cooperation with members of the same group in other parts of the exchange network.

This is how a trade diaspora works: Members of the trading group move into new areas, settle down in market or transport centers along major trade routes, and focus on exchange while maintaining a separate cultural identity from their host community. The foreigners attempt to maintain a monopoly of their particular trade specialization; this allows them to function as intermediaries or cross-cultural brokers between their host community and the outside world. The shared identity among different diaspora communities provides the framework for the communication, credit, and reliability necessary for the orderly long-term functioning of the exchange system. To allow for this ease of interaction between widely separated nodes, diaspora organization is stable at the group level, but

allows for tremendous mobility among its members. The group has its own (formal or informal) political organization which maintains order within the group and coordinates with other diaspora groups to maintain the diaspora's identity and economic "turf" in dealing with host communities. Often, the maintenance of this distinct political organization requires some level of judicial autonomy and mutual assistance as well.

Organizational factors alone are insufficient to hold the group together. Trade diasporas strongly emphasize their distinctive cultural identity as well, defining themselves as a moral community which acts as a group to enforce the conformity of individual members of the group to shared values and principles (Cohen 1971:276). An ideology of this type is necessary to build and maintain the cohesion of the diaspora and its effectiveness as a trade network despite the centrifugal forces of spatial dispersion and competition from host communities or other trade diasporas. For this reason, many of the best-known trade diasporas are closely associated with "universal" civilizations or religions such as Confucianism, Hinduism, Islam, or Judaism (Cohen 1971:277). In these kinds of interregional exchange systems, the most cohesive diaspora groups survive and prosper; groups that lose or lack a strong unifying ideology tend to fragment, lose the trade monopoly which is their raison d'être, and eventually merge with their host communities (see e.g., Warms 1990).

Why do host communities allow diasporas to settle and accord them cultural/social autonomy? Stranger communities are useful to local rulers for several reasons. In many agrarian or pastoral societies, exchange is viewed as a suspicious activity that is best left to outsiders or socially inferior groups within the polity (Azarya 1980). Sponsoring and taxing trade diasporas provides an easy way for rulers in the host community to increase their own wealth without having to go through the conflict inherent in restructuring power relationships within their own community (Yambert 1981). Because the strangers of the trade diaspora have no local social ties, they have little choice but to be dependent on and therefore loyal to the ruler of the host community. The key point to note here is that the social position of the diaspora is closely tied to local politics, specifically the degree of sociopolitical complexity, and the nature of factionalism or competition in the host community.

A trade diaspora can have a wide range of possible relationships with other diaspora nodes, with their homeland, and especially with their host communities. The three most important points along this continuum are (1) marginal status, (2) social autonomy, and (3) in the extreme case the diaspora can dominate the host community.

In some cases, the rulers of the host community treat the trade diaspora as a marginal or pariah group to be exploited at will. The foreign enclave's presence is only tolerated because of its usefulness to the host community. In these cases it is the host community which emphasizes the social separation of the diaspora group, defining the latter's autonomy more through restrictions than through rights. This marginal status was often characteristic of Jewish trade diasporas in medieval Europe (Curtin 1984:5), Jains in India, or merchant groups in the Fulani-controlled Islamic state of Massina in the middle Niger region during the eighteenth and nineteenth centuries (Azarya 1980). Although the Massina state reluctantly recognized the importance of exchange, it was seen as a low status activity completely at odds with *pulaaku*, the Fulani cultural ethos. As a result, virtually all exchange activities were carried out by non-Fulani such as the Dyula, Arabs, or Moors. These groups were tolerated, but restricted in their activities, and denied access to the state center at Massina (Azarya 1980:443-4).

The second modality of diaspora status is that of protected autonomy within the host community. This can be gained either through the explicit granting of autonomous political status by the local rulers, as in the case of the Chinese trade diaspora in southeast Asia or else by what one might call a "strategy of vulnerability" as exemplified by the Jahaanke in West Africa.

The Chinese trade diaspora was able to gain a high degree of autonomy in its various southeast Asian host communities by being financially useful to local ruling elites. The Chinese had been long distance traders throughout southeast Asia for centuries, trading Chinese porcelain, cotton goods and silk in return for pepper, nutmeg, and cinnamon. Ties to the homeland played an important role in establishing the autonomy of the overseas Chinese. The maritime experience of Chinese long distance merchants and their monopoly on access to Chinese ports and goods were powerful incentives to local elites in Thailand, Indonesia, and the Philippines to extend them numerous trading monopolies, tax concessions, and exemptions from corvée labor. The Chinese traders usually occupied special quarters set aside for them by the local rulers. In return, the Chinese diaspora provided local rulers with exotic prestige goods and other economic benefits of exchange such as customs taxes and loans when needed (Yambert 1981:180). Chinese diaspora groups forged close alliances with the local rulers, and played key roles in the financial and administrative hierarchies of their host polities as tax farmers or other state officials. This client-community status benefited the Chinese, who were able to occupy a profitable, protected socioeconomic niche. At the same time, the local rulers gained new sources of income and a group of subordinates whose dependence insured their loyalty (Yambert 1981:181). In short, trade diasporas such as the Chinese gained autonomy through the

commercial advantages accrued from their close ties to the mainland, coupled with a strategy of political alliances with powerful local patrons.

By contrast, in strategies of vulnerability, the diaspora actively avoids alliances with local elites. Instead, the foreign enclave emphasizes its social distinctiveness and nonthreatening status by limiting its sphere of social action to exchange activities and nothing else. The diaspora survives by following a policy of neutrality in the face of factionalism and competition in the host community. The Jahaanke (Diakhanké) trade diaspora in the Senegambia region of seventeenth- and eighteenth-century West Africa provides a good example of this social strategy (Curtin 1971; Curtin 1984:5). Although the Jahaanke defined their identity through common culture, language, tradition, and a sense of solidarity with other Jahaanke communities, there is no evidence that this group has ever been a political entity. Their villages were independent of each other and were more or less independent from local political authorities. Lacking political power of their own or a tie to a strong state in their homeland, were completely at the mercy of their host communities. To gain protection and autonomy in these conditions, the Jahaanke emphasized their cultural distinctiveness as a separate group through a "combination of pacifism, avoidance of political power and worldly rule, devotion to Islamic teachings as a profession, and a similar devotion to commerce" (Curtin 1971:229). This explicitly neutral stance provided the Jahaanke with a tremendous commercial advantage in the unstable political conditions of the areas involved in the Senegambia multipolity trade network for a period of almost three centuries. By removing themselves from the political sphere, they were able to move freely between hostile polities and trade successfully in gold and salt without being subject to harassment or attack. If their neutral status was ever threatened, the Jahaanke simply relocated to safer areas. This arrangement benefited all parties concerned; the autonomy gained through this strategy of vulnerability allowed the Jahaanke to trade freely over vast distances of up to 1,000 km.

At the extreme end of the range of variation in the organization of interregional exchange is the situation where the trade diaspora actually controls its host community. The classic examples of this are the European trading post empires in Africa and Asia in the eighteenth and nineteenth centuries. This third possibility is the form of trade diaspora implicit in world-systems models. The European trade diasporas established mercantile enclaves under their own military control while also using force to control the terms of trade with their host communities. This aggressive strategy was so successful that by the beginning of the nineteenth century the English in India and the Dutch in Indonesia had effectively

transformed their militarized trade diasporas into actual territorial empires (Curtin 1984):5).

There is also a wide range of possible relationships among different nodes in the trade diaspora and between the diaspora and its homeland. One cannot assume that a foreign trading enclave represents a unified political entity controlled by its homeland/metropolis. For example, the Greek colonies in the Mediterranean, Aegean, and the Black Sea during the later first millennium B.C. retained certain ideological ties with their mother cities, but were not necessarily dominated by them. At the same time, ties between colonies were weak or nonexistent, except in the broadest sense of a shared cultural identity. At the other end of the spectrum, diaspora nodes may be closely linked politically, as was the case in the Portuguese Estado da India, where the viceroy in Goa ruled over secondary diaspora nodes or colonies in Mozambique, Malacca, and Macao.

Given the extent of this variability in diaspora organization, and the degree to which it depends on the often factionalized sociopolitical structure of the host communities, it should come as no surprise that trade diasporas do not remain static over time. Curtin points out that one of the most striking characteristics of trade diasporas is their tendency to work themselves out of business. Diasporas begin because the differences between cultures in an interregional exchange network require the services of mediators. However, these middlemen become victims of their own success; extended periods of mediation can reduce cross-cultural differences and hence the need for cross-cultural brokers (Curtin 1984:3). When this happens, the diaspora loses its distinctive status as members of the host community take over the foreigners' position in the exchange network. At this point, several things can happen. In one common pattern, the trade diaspora can leave the host community and return to its homeland if the cultural ties between the two communities have remained strong enough over time. This outcome was typical of medieval European trade diasporas, such as those connected with the Hanseatic league. These formal commercial enclaves were withdrawn from their host communities in places like London by the end of the sixteenth century, as English merchants took over the trade. In a variation of this out-migration pattern, the trade diaspora may simply be expelled (regardless of whether they return to their ancestral home), as were the Indians from Uganda or the Jews from Spain. In a second pattern, the trade diaspora may remain in the host community, but its members find new socioeconomic roles and remain as an ethnic minority. The classic example of this second pattern is the evolution of the Chinese trade diaspora in southeast Asia from a protected community closely involved in international trade and local administration into a series of ethnic minorities involved in local exchange and manufacturing (Yambert 1981). In the third

pattern, with the loss of its distinctive economic role, the trade diaspora can slowly disintegrate as a distinctive social group and be absorbed or assimilated into the host community (Warms 1990).

The trade diaspora concept thus provides a framework that allows for a tremendous range of variation in the organization of interregional interaction, in the strategies pursued by foreign trading enclaves and host elites, and in the developmental trajectories of these networks. Once we recognize that these different possibilities exist, how do we link them to specific historical or archaeological cases? From the examples discussed above, different forms of power configurations —within and between homelands, enclaves, and host communities—appear to have a tremendous influence on the relationship between a trade diaspora and its host community.

The military, political, and economic power of the trade diaspora or its parent community plays a key role in structuring interregional reaction. This is, of course, most clearly evident in the dominance of the militarized European trade diasporas over their Asian and African host communities in the eighteenth and nineteenth centuries, and forms the basis of the world-systems model. When the homeland polity is either weak (as in the case of many Greek colonies) or nonexistent (as in the case of the Jahaanke), then there is far more room for negotiation between hosts and diasporas in the organization of interaction within the network.

However, the diaspora and the homeland do not exercise their power in a vacuum. Although minimized in the world-systems model, the military, political, and economic power of the host community (i.e., the "periphery") plays a vital role in the configuration of the diaspora community and its broader role in the interregional exchange network. Powerful centralized polities can dictate the degree of autonomy of the trade diaspora, and the extent to which it can interact with its host society. Here it is important to remember that the host polities are not homogeneous entities, but rather comprise different factions or interest groups. In relatively weak polities, local elites wishing to bolster their own power may grant a high degree of autonomy to trading diasporas in order to build up their own wealth while gaining a loyal, dependent client group outside the traditional local social order as a counterbalance to potential local rivals. Curtin suggests that when the local elites in the host community can dominate the alien enclave, there will be weak links between diaspora nodes; when local rulers are weak, trade diasporas can maintain strong links between nodes and with their homeland (Curtin 1984:7). Powerful host polities can marginalize the trade diaspora if they perceive it to be a threat to the ruling elite's economic or ideological base (as in the case of the Fulani state of Massina). Alternatively, when a powerful host state

plays a positive role in setting the terms of trade through effective administration of transportation, currency, and public order, this can lead to the breakdown of diaspora autonomy, its integration into the society as a whole, its identification with the center, and the removal of its stranger status (Azarya 1980:445).

A third critical aspect of power relationships in trade diasporas concerns control over routes of movement and communication, access to trade goods and thus the terms of trade. As noted earlier, diasporas often attempt to gain a "vertical monopoly" over as many different stages as possible in the movement of trade goods between regions. They are able to do this most effectively when communication and transportation between polities are unreliable or dangerous; under these conditions, the culturally-defined economic linkages between different diaspora nodes give the foreign traders a competitive advantage in dealing with their host communities. The world-systems model emphasizes the European core or homeland's control over the production of finished goods, and its monopoly over maritime trade as the basis for its domination over the Asian and African peripheries. However this is only one of several possible power balances based on access and communication. When core control is less than absolute, the politics of access can give rise to different relations between the diaspora and its hosts. One of the best examples of this is the way that, even without the active support of their homeland, Chinese merchants were able to use their monopoly of access to ports in mainland China as a way to negotiate an autonomous status in their southeast Asian host communities. However, this is a game that the local communities can play as well. Thus in the trans-Sahara caravan trade, the Sudanic host communities were able to maintain some degree of control in their dealings with the Arab caravan merchants by keeping secret the locations of the gold mines whose output was essential to the trade (Austen 1978:7).

As these examples illustrate, the organization of an exchange system depends on the balance of power among the host community, the trade diaspora, and the diaspora's parent community or homeland. We should be clear that the trade diaspora model cannot account for every form of interregional interaction. However the construct can specify the determinants of power relations among the participants in a wide variety of cross-cultural exchange contexts ranging from entrepreneurial activities by individuals or small groups all the way up to the government-organized colonial enclaves.

Conclusion

I have tried to make several points in this chapter. Both the original and modified forms of the world-systems construct have two drawbacks that seriously

compromise their usefulness as ways to understand interregional interaction. First, by overemphasizing interaction and the global structure of the system, they ignore or minimize the role of internal dynamics in the areas that they call "peripheries." Second, world-systems approaches fail to specify the ways that factors such as distance affect power relationships among the different polities within the interregional exchange network.

As an alternative to world-systems approaches, I have argued here that we need to develop a research paradigm that recognizes the importance of interregional interaction, without automatically assuming that it is the prime determinant of political economy. The internal dynamics of each polity can be as important or even more important than the external dynamics of interaction in determining the organization of the larger scale interregional network. As a result, we need to work at two different scales of analysis in order to identify the variables that explain variation in the organization of both the networks themselves and their constituent polities.

As a first step in this direction I have outlined two models that fit within this research paradigm. At the interpolity level of analysis, the Distance-Parity model formally recognizes variability in modes of interregional interaction, and specifies the conditions under which the power of the core will be constrained, leading to increasing symmetry in economic, political, and military relations between polities. The Trade Diaspora model looks within these polities, especially those of the periphery, to show how exchange—the most common form of interaction—actually works under conditions of parity between different regions in the network. Most importantly, the Trade Diaspora model's focus on the internal dynamics of the actual participants shows that a group can control exchange without necessarily controlling any polity in the network. By emphasizing the roles of internal dynamics, agency, and distance, these complementary models allow us to formulate explicit, testable reconstructions of how and why noncapitalist networks of interaction function and change over time.

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10

Multiple Levels in the Aegean Bronze Age World-System

P. Nick Kardulias

Introduction

Many scholars have argued whether precapitalist trade networks constitute world-systems. At least as far as the Aegean Bronze Age (BA) is concerned, such a description seems to be appropriate. Overland and sea trade routes, both local and long-distance, were a regular feature of Aegean BA societies. In fact, exchange systems of some sophistication existed in the area during the Neolithic and Mesolithic, but they did not possess the requisite traits of a world-system. The BA, however, was a different story. Aegean societies in the third and second millennia B.C. attained social complexity (ranked, stratified, and finally state status in the Late Bronze Age), with well-organized redistributive and later market economies based on the accumulation of substantial agricultural surpluses, craft specialization, and distribution systems with a variety of nodes. The trade items included staple foods, utilitarian objects (e.g., pottery) and preciosities. But to place these activities in a proper context, I would like to evaluate briefly the world-systems literature as it relates to antiquity, and in particular to the Old World. I will then present some specific evidence to support the contention that the Aegean BA economy was an adjunct to an Eastern Mediterranean world-system. While Wallerstein's model offers valuable insights to the operation of trade networks, his approach has certain limitations. I will explore briefly some of these limitations, discuss revisions suggested by other scholars, and demonstrate the validity of the altered model with data from the Aegean. I will also suggest that the world-systems approach needs to place greater emphasis on production as the crucial nexus of economic activity.

Economic History: The Ancient Economy

Before I review the world-systems literature, I would like to provide an overview of scholarship on the economic history of the ancient Mediterranean. The ideas of

historians have acted as the wellspring for advocates and detractors of world-systems theory (WST). One can see mirrored in the work of ancient historians some of the key issues WST confronts. In his monumental work on the Roman and Greek economies, Rostovtzeff discusses the emergence of distinct economic classes. He talks of an urban bourgeoisie that held most of the wealth, while peasant landowners, tenant farmers, day laborers and slaves had minute incomes in the Hellenistic Aegean (Rostovtzeff 1941:1145, 1149). In order of importance, Rostovtzeff (1941:1168, 1177) lists the key economic activities as agriculture, forestry, mining, and fishing. Agricultural products included wheat, barley, dairy items, honey, olive (fruit and oil), wine, and meat. Systems of production varied according to the need of each area and industry. Rostovtzeff claims that "Decentralization of production became the tendency of the day, and local, not centralized production became the dominating feature of the ceramic industry" (1941:1210). Metals were high demand objects and generated much commercial activity (Rostovtzeff 1941:1219). Textiles were important products and exports of Egypt, Phoenicia, Cyprus, and Greek cities of the Anatolian coast, but most households produced material for their own needs (Rostovtzeff 1941:1222-1223, 1227). Rostovtzeff suggested trade occurred at two levels. Local trade took place among the parts of the same state or other Greek states, while foreign trade involved regions (e.g., India, Parthia, Illyria) outside that system (Rostovtzeff 1941:1238). Even in periods of political upheaval, trade in luxury items continued. The foreign goods reached the Mediterranean by core-core exchange; the peripheral zones included such areas as Somalia, Baluchistan, and central Asia (Rostovtzeff 1941:1245, 1247). Trade in manufactured items was never well developed, perhaps with the exception of luxury goods. Trade networks tapped the vast hinterlands of distant areas. For example, Panticapaeum in the Crimea was an entrepot for fish from the Sea of Azov and items (e.g., animal skins) from the southern Russian steppes (Rostovtzeff 1941:1263). In a general assessment, Rostovtzeff (1941:1303) characterizes the Hellenistic economy as capitalism, in which the East eventually incorporated the West in an *oikoumene.*

The eminent sociologist Max Weber tackled the problem of how to describe the ancient economy in his book, *The Agrarian Sociology of Ancient Civilizations.* He considered the question whether "Antiquity had characteristics which rule out use of concepts used to analyze the economic history of mediaeval and modern Europe" (Weber 1976:42). He concluded that, because property was used to make a profit in a market economy, the ancient system qualifies as capitalism. Indeed, capitalism was particularly evident during so-called golden ages (Weber 1976:51). Public finance, and in particular tax farming, was the major form of ancient capital investment. City states offered greater opportunity for such capital growth because they lacked the restrictive bureaucracies found in monarchies. So

for Weber the ancient economy of the Near East and Mediterranean was a variable phenomenon, but trade played a major role in a lucrative capitalist system geared to individual profit. He outlined the major traits of ancient economies: "1) cities exported certain articles of high labor input and quality; 2) cities were constantly dependent on grain imports from distant lands; 3) slaves were purchased; 4) city policies were shaped by specific commercial interests" (Weber 1976:48). As an extension of this view, Pirenne (1933:2-5) argued that the well-developed commerce of the ancient world, centered on the Mediterranean, fell apart only after the Muslim conquest of the southern, southeastern, and western shores of the great inland sea. Contrary to Pirenne's view, the Islamic advances did not terminate, but rather reoriented, the system. Europeans had to trade through Muslim commercial centers, such as Damascus and Cairo. In addition, Byzantium offered a series of important emporia, including Constantinople, Smyrna, and Trebizond. One can argue that this system was core-core exchange, but a vast network was tapped.

M. I. Finley developed what some have called the primitivist view of ancient economies. Finley argued that cycles in ancient economies were due to natural catastrophes and political turmoil, and not to supply and demand in a money market. In addition, he noted, in agreement with Rostovtzeff, that manufacturing played a minor role in providing goods to exchange for economic necessities (food, metal, slaves). Furthermore, Finley contended that the much-touted ancient trade network was a restricted phenomenon:

> The roll of nearly all the great centers . . . can be called without going more than a few miles inland. For a long time everything beyond this thin belt was periphery, land to be drawn upon for hides, food, metals and slaves, to be raided for booty, to be garrisoned for defense, but to be inhabited by barbarians, not by Greeks or Romans. . . . To be meaningful, "world market" must embrace something more than the exchange of some goods over long distances. . . . One must show the existence of interlocking behavior and responses over wide areas—Erich Roll's "enormous conglomerate of interdependent markets"—in the dominant sectors of the economy, in food and metal prices, for example, and one cannot (Finley 1973:34).

Citing the economic geographer B. J. L. Berry, who noted that central-place settlement hierarchies depend on extensive division of labor and the lack of household self-sufficiency, Finley (1973:34) suggests that ancient economies, which lacked these traits, cannot be treated as capitalist systems with well-

integrated exchange networks. The economic systems were much more independent. This perspective seems to mirror Polanyi's (1957) approach to ancient economic systems as embedded features of the particular cultures. For Polanyi, markets did not characterize ancient economic systems because they lacked the uniformity necessary for such a structure. Some readers will recognize in Polanyi's, and by extension Finley's, arguments the basis for the substantivist approach that decries the formalist effort to describe all economic behavior by universal rules of economic behavior.

World-Systems Theory

Wallerstein describes a world-system as one of only two true social systems (the other is the small, isolated society with an autonomous mode of subsistence—e.g., the !Kung San foragers of the Kalahari Desert in southern Africa) because it is self-contained and its developmental dynamics are largely internal. World-systems "are defined by the fact that their self-containment as an economic-material entity is based on extensive division of labor and that they contain within them a multiplicity of cultures" (Wallerstein 1974:348). Wallerstein distinguishes between two types of world-systems-world-empires and world-economies. The difference is the presence in the former of a single political structure over a vast area. Capitalism provided stability to the modern world-economy that emerged in the fifteenth century, offered a venue for interaction among a number of nation-states, and provided the means for constant expansion of the European world-system. Furthermore, the operation of a world-economy requires the presence of core-states and peripheral areas. Core-states exhibit complex political structures (stratified class systems with large bureaucracies) and, by means of superior technology, control the major facilities of production, transportation, and communication. Political organization in peripheral areas is at the pre-state or incipient state level and is relatively weak compared to that in core-states. Core-states incorporate peripheral areas into the capitalist world-economy because these peripheral regions often contain important natural resources. European core-states controlled the division of labor and reserved those tasks that required a higher level of ability and capital investment for the higher-ranking area, i.e., Europe itself. Through political and economic control of the system, Wallerstein contends, core-states exploited the labor and material resources of peripheral areas and received a disproportionately large share of the surplus or benefits. European nation-states competed among themselves for control or access to peripheral areas in order to increase profits (Wallerstein 1974:348-350).

Wallerstein's image of the emergent world-economy and the relationship between core-states and peripheral areas provides an excellent model of European expansion in the early modern period. By presenting incorporation into a world-

economy as largely unidirectional, however, Wallerstein oversimplifies a complex process. Hall (1986), among others, argues that one must study the local conditions in peripheral areas as well as capitalist economy in core-states in order to understand fully the nature of incorporation as a variable phenomenon. Hall notes that incorporation into a world-economy is a matter of degree and that non-state peripheral societies play a more active role than generally believed. This aspect is particularly true for various periods in antiquity when complete domination of a peripheral zone was technologically and politically impossible.

A major issue is the degree to which the world-systems model applies to the ancient world. Wallerstein suggests that the world-system was an outgrowth of capitalism and is thus a creation of the sixteenth century. Braudel (1977) believes such systems existed in antiquity. An important effort has been Philip Kohl's (1989) revision of WST to fit ancient conditions. In a careful critique of the primitivist views of M. I. Finley and others, Kohl cites many examples of price-fixing, inflation, and market mentality that demonstrate the complexity of ancient economies. He builds a strong argument for the existence of an intricate multicentered world-system during the BA in Southwest Asia. In contrast with modern world economies, ancient technologies were easily transferable from core to periphery, and the latter could offer its resources to competing states and thus retain its autonomy; the lack of major colonization precluded the exploitation and underdevelopment of the periphery. Kohl (1992) explores the core-periphery relationship specifically as it concerns the Transcaucasus and provides concepts useful for an examination of the Aegean BA. He borrows Chernykh's notion of "metallurgical provinces," defined by "their shared utilization of typologically similar metal ornaments, tools, and weapons; by a common technology of metallurgical production; and by the availability of or access to the same metallurgical sources" (Kohl 1992:134). What he proceeds to say about the Transcaucasus is equally applicable to the Aegean area:

> If tin was not obtained locally, the very profusion of tin-bronzes in Transcaucasia from Late Bronze times onward suggests an interregional linkage with real economic dependencies (or, better, interdependencies). . . . The barbarian "peripheries" or northern frontiers of Transcaucasia and Central Asia, like their Aegean counterpart far to the west, did not palely reflect the light of civilization emanating from the ancient Near East; rather, they stimulated the latter "civilized" areas and profoundly affected their courses of development (Kohl 1992:134-135).

Below, I investigate the Aegean BA trade network as just such an interdependent part of a larger world-system. While the trade in metals was central to this system, I examine other commodities that also played a significant role.

In an effort similar to Kohl's, Zagarell (1989) redefines the relationship between pastoral societies and early states. Similar settlement and subsistence patterns characterized both lowland and highland Mesopotamia until late Middle Chalcolithic times, when the latter reverted to smaller settlements and mobile pastoralism while sites on the alluvial plains increased in size and intensified irrigation agriculture. Zagarell interprets conditions in both areas as efforts to enhance production. Due to environmental limitations, the highland society could not emulate the lowland model (expansion of agriculture). To enhance production, highlanders turned to pastoral nomadism on a large scale. In an excellent discussion of these complementary developments, Zagarell notes there is no inherent antagonism between pastoral and agricultural societies. This assessment has obvious implications for economic exchanges between such populations and presents a model of core/periphery interaction with no exact modern analog.

In a review of world-systems applications, Schortman and Urban (1987:58-60) point out some of the problems associated with using the world-systems approach in archaeology. First of all, they find Wallerstein's definition of social system primarily in economic terms to be limiting. Also problematic for them is his neglect of cultural variation as an important component in the interaction process. A significant difficulty is Wallerstein's assertion that precapitalist world-systems did not exist; his assertion that precapitalist empires were intrinsically unstable has no empirical backing (Schortman and Urban 1987:59). A key point is that Wallerstein's stress on the economic aspects of trade obscures the noneconomic, nonmaterial elements of both trade and other types of interaction (Schortman and Urban 1987:61-62, 1992). In their model of intersocietal contact, Schortman and Urban suggest that the units of study should be society and ethnicity, which are connected by the flow of information, i.e., "energy, materials, social institutions, and ideas," and then assume that "Only that information that has the ability to set off positive feedback relations within a society has developmental significance" (Schortman and Urban 1987:69-69). So, not only trade, but also factors such as shifts in ideologies inspired by the introduction of foreign information can generate social change. Because the various members of the network are affected by the interaction, they use the term coevolution to describe a situation of pronounced intersocietal interaction (Schortman and Urban 1987:69,76). While I agree that a narrow concentration on trade oversimplifies the process of interaction, I think that a focus on material concerns explains more of the

variation in the archaeological record. What, precisely, changes in this process of coevolution?

A primary effect is a shift in production, whether it is in terms of intensification of a particular technique, or expansion in an effort to augment the resource base. The use to which the additional products are put will vary according to a range of values, but the realization of the new goals, whether these are strictly material or not, cannot be achieved without augmented surplus. While we cannot read the minds of people long dead, we can see the effect on the landscape and in sites of their change in productive capacity. The underlying goal in the ensuing discussion is to demonstrate the role of trade in expanding the productive base of the BA Aegean. Concepts provided by several other authors are useful in this attempt.

Recently, Chase-Dunn and Hall (1991, 1993) have suggested revisions to World-Systems Theory (WST) to make it appropriate to a broader historical and geographical context. The basic thrust of their work is "that the fundamental unit of historical development is not the single society, but the entire intersocietal context within which individual societies exist" (Chase-Dunn and Hall 1993). Their goal is to provide a comparative matrix within which to study contacts for all societies, even stateless foraging groups. The interactions, in ascending order of regional extent, involve the exchange of bulk goods, political or military interchange, prestige-goods exchange, and information and cultural flows (Hall, personal communication, 1995); more localized interactions can be nested in more extensive systems. Of special relevance to the present study is their definition of two kinds of core/periphery relationships:

> The first will be called core/periphery differentiation, in which societies at different levels of complexity and population density are in interaction with each other within the same world-system as defined above. The second type is a core/periphery hierarchy, which will be understood to mean the existence of political, economic or ideological domination between different societies within the same world-system.... We designate two types of core/periphery relations . . . because we think it is mistaken to assume that all relations among "more developed" and "less developed" societies involve exploitation and the processes of the development of underdevelopment which are often found in the modern world-system (Chase-Dunn and Hall 1991:19).

This distinction places a label on the type of interaction Kohl describes for Southwest Asia in the BA; what he argues for is core/periphery differentiation,

and I believe the same term applies to the Aegean BA trade system. Chase-Dunn and Hall then propose a tripartite typology of world-systems based on the societal complexity of the most developed societies in each category: (1) kin-based mode dominant; (2) tributary modes dominant (urban cultures); (3) capitalist mode dominant. Category two includes both primary empires and multicentered world-systems in which peripheral zones, empires, and autonomous states interact; the Aegean system fits the latter description. From this theoretical edifice, Chase-Dunn and Hall (1991:27-30) derive four working hypotheses: (1) social hierarchy institutions are mandatory for intersocietal domination; (2) stratification in core societies enhances the ability of core/periphery hierarchies to exploit peripheral zones; (3) the development of market exchange, monetary systems, and other mechanisms of trade facilitate the spread to peripheral regions of social and technological elements from the core; (4) social innovation occurs readily in semiperipheral zones because they receive input from cores and peripheries and are not burdened by excessive core controls. Chase-Dunn and Hall provide a dynamic, useful model by which to understand the variation in world-systems and to test basic concepts. The present study is in part an answer to their call for case studies to provide the comparative data base necessary to test their hypotheses.

Sherratt (1993) has used the term "margin" to designate a zone that does not interact directly with a core, but does provide materials that are critical to the operation of a world-system. He points to the role of amber from the Baltic region and various metals from central Europe in the Mediterranean trade system. The urban core of the Near East and the Aegean in the BA stimulated the exchange of many commodities through multiple links without members from either geographical extreme ever coming into direct contact. Parts of this system existed in the Neolithic and continued down into historic times, but not without alterations. The trade in metals, especially bronze, was particularly significant; the liquidity provided by bronze made possible the integration of "regional exchange cycles." Sherratt implies that the BA is aptly named, not simply because of its artifacts, but because this metal alloy fueled the economic expansion on which many early states depended.

The Aegean World-System

The Aegean culture area is bounded by the Greek mainland on the west, Macedonia and Thrace on the north, Anatolia on the east and Crete on the south (Figure 10.1). The continental shores of the area are heavily dissected and offer numerous good anchorages. For millennia, the rough hinterland has forced the people of the region to look to the sea as the major avenue of trade and communication. Human occupation in the region dates back to the Lower Palaeolithic (Tartaron and Runnels 1992), but witnesses no great upswing until

the Neolithic. With the exception of Crete and some of the Northern Sporades, none of the Aegean islands was settled until well into the Neolithic. The Bronze Age, however, witnessed a substantial increase in site number, size, and complexity (Cherry 1990; Jameson et al. 1994). The conditions for stratified society developed in the third millennium B.C. and blossomed into state-level organization in the next millennium (Renfrew 1972). Scholars have argued for the primacy of various factors in the emergence of these early state polities, represented by the great palaces at Mycenae, Knossos, Pylos, and elsewhere. Halstead (1981; Jones et al. 1986) stresses the role of social storage in a redistributive economy.

Renfrew (1972) has offered a variety of hypotheses. His subsistence/redistribution model argues that domestication of the vine and olive stimulated the cultivation of marginal lands in the Early BA and led to an increase in population and subsequent stratification through unequal distribution of the wealth generated by the agricultural system. In the craft specialization/wealth model, Renfrew contends that specialized production and trade produced wealth, and stimulated hierarchical social divisions. Van Andel and Runnels (1988) suggest that elites sponsored agricultural enterprises because domesticated products provided much of the trade material by which elites gained their exalted status. These and other views assign trade a critical importance in establishing and maintaining complexity. While trade is only one facet of the total center-periphery connection (Edens 1992:134), it has received a great deal of attention. Below I examine the Aegean exchange network as a general system and then how it relates to several specific materials, i.e., obsidian and metal (copper and bronze).

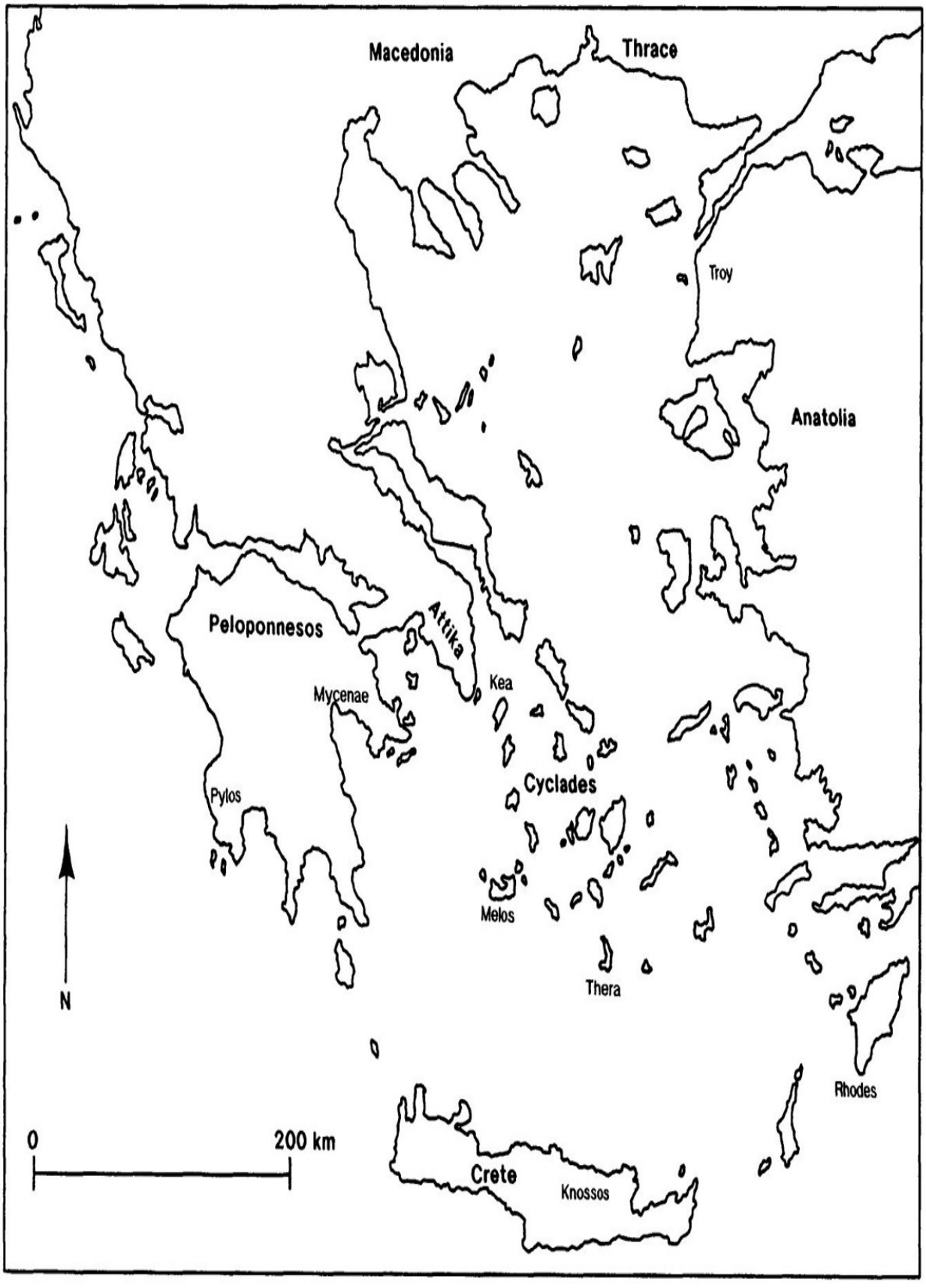
Macedonia
Thrace
Troy
Anatolia
Peloponnesos
Attika
Kea
Mycenae
Cyclades
Pylos
Melos
Thera
Rhodes
Crete
Knossos
N
0
200 km

***Figure 10.1**. Map of the Aegean showing important Bronze Age sites.*

I would like to suggest an emendation of the system described by Chase-Dunn and Hall (1991). In particular their conception of the core/periphery differentiation is applicable, with some modifications, to the situation in the BA Aegean. Whereas they see societies at different levels of sociopolitical integration interacting in such a system, I suggest that there are instances in which the groups involved are at the same level of complexity, i.e., peer polities (see Renfrew and Cherry 1986). Furthermore, the specific system in the Aegean had three interconnected, but also separable levels:

Internal. Such networks operated in a narrowly defined region within which land transport or short coastal hops sufficed for the transfer of goods. The local systems on Crete, Cyprus, and the Argolid peninsula would be of this type. In each area there existed a group of relatively small states, described as Early State Modules (ESMs) by Renfrew (1984). Within each polity were a number of settlements which exchanged a variety of commodities. I do not mean to suggest that the exchange was egalitarian. Some individuals and settlements certainly acted as key nodes in the system and siphoned off a significant share of the goods. I would argue, however, that there was a rough parity in the economic structure within each of the polities, and that most of the ESMs were on an equal footing. Involved in such exchanges would be a range of goods either native to each region or easily obtained by each.

Intermediate. This system encompassed the entire Aegean area and thus involved sea travel between island and mainland. Scholars have formulated various schemes to model this interaction. Cherry and Davis (1982) proposed a "Western String" exchange system in the western Aegean between Attika and Thera, and others have suggested a Minoan thalassocracy in which Crete governed a vast commercial empire. Knapp (1993) denies the existence of such commercial monopolies. Whether one polity or island was preeminent in this trade or not, the exchanges took place between entities of roughly equal stature. The commodities involved in this network probably included some foods, pottery, and certain prestige goods not available locally.

Long-distance. In this category would be connections with societies outside the Aegean area, including the Near East, the Anatolian interior, and Egypt. The available evidence indicates that this extrapelagic exchange centered around a variety of goods, including foodstuffs, utilitarian goods, and preciosities. The

system brought Mycenaeans and Minoans into contact with the great empires of North Africa and the Levant, but neither side dominated the other, although there certainly was influence (economic, artistic, etc.). In WST terms, this was core-core interaction. It is perhaps at this level that one can best perceive the large-scale BA system which, according to Frank (1993), pervaded the entire Near East and neighboring areas like the Aegean. Frank also discusses the cyclical expansion and contraction of the BA world system. He suggests that the period 1400-1200 B.C., which coincides with the Late BA in the Aegean and will be the focus of much of the discussion below, was a general phase of expansion (Frank 1993:389).

The Sherratts (1993) discuss the development of a Mediterranean world-system in the first millennium B.C. in a similar fashion. They suggest that, in contrast to the Bronze Age, the Iron Age economy exhibited considerable local variation as a result of people taking advantage of regional opportunities. While I believe the BA economy also had considerable local differentiation, I do agree that the system was highly fluid and that individuals played an active role in shaping the exchange networks.

Internal System

A number of archaeological finds attest to the existence of a fairly extensive exchange system in the prehistoric Aegean. The distribution of non-local goods began in the Upper Palaeolithic, continued in the Mesolithic, gathered momentum in the Neolithic, and culminated in the extensive system of the BA. For the earlier periods, obsidian is a good indicator of the extent of the system. Sourcing studies by Renfrew and his colleagues (Cann and Renfrew 1964; Renfrew et al. 1965; Dixon and Renfrew 1973) indicate that obsidian from the island of Melos is widespread throughout the Aegean beginning in the Upper Palaeolithic. For the Neolithic, obsidian has been found at Argissa Magoula, Sesklo (Theocharis 1981:37), Rakhmani, Dhimini, Tsangli, and other sites in Thessaly (Wace and Thompson 1912:43, 84, 122). Macedonian Neolithic sites with obsidian include Servia (Ridley and Wardle 1979:229; Watson 1983:123), Nea Nikomedia (Dixon et al. 1968:41), Soufli, and Sitagroi (Runnels 1983:417). In southern Greece Neolithic sites with obsidian include Tsoungiza/Nemea (Blegen 1975:272), Baroutospilia (McDonald and Hope Simpson 1969:158), and Lerna I (Caskey 1968:313). Island contexts include Kephala on Kea (Caskey 1971:391), Knossos on Crete (Evans 1964:162), Saliagos on Antiparos (Renfrew et al. 1965:238), and Aspripetra Cave on Kos (Leekley and Noyes 1975:29).

During the BA, the number of sites with obsidian increased, as did the quantities of the material present. On the Greek mainland, such sites include Mycenae (Wace 1949:112; Mylonas 1966:102), Tiryns (Shelford et al. 1982), Lerna (Runnels 1985b), Prosymna (Blegen 1937:342), and many spots located by systematic surveys in Messenia (McDonald and Hope Simpson 1969; McDonald et al. 1975:120), and the southern Argolid (Kardulias and Runnels 1995). In addition, many of the sites from the Neolithic list continued to yield artifacts in the BA. Among the key island sites are Agia Eirini on Kea (Davis 1977:110, 112, 114, 116); Debla (Warren and Tzedhakis 1974:332), Myrtos, and Mochlos (Warren 1972:328) on Crete; Phylakopi on Melos (Renfrew 1982:223); Akrotiri on Thera (Shelford et al. 1982:190); Kastri on Kythera (Huxley 1972:217); and several locations in the Dodekanese (Leekley and Noyes 1975:28, 31). This is by no means an exhaustive list, but rather serves to provide some sense of the geographic spread involved. In addition to obsidian, the distribution of millstones made of andesite, the sources of which Runnels (1981) identified in the Aegean, demonstrates the existence of significant trade in the Neolithic and BA Aegean (Runnels 1983, 1985a, 1988).

The key point about obsidian procurement is that visitors to Melos seem to have had direct, unimpeded access to this resource (Renfrew 1982:223-224; Torrence 1986). It seems that travelers roughed out conical cores which they carried back to home sites for final tool production. The distribution of obsidian suggests that people in the Cyclades, Crete, and the Greek mainland all had the opportunity and knowledge to acquire and process the material (Renfrew 1972:443). If any regulation of the obsidian trade did occur, it is more likely that such control started at the coastal sites where the rough cores arrived. Sites in closest physical proximity to Melos have the majority of the cores; as distance from the source increases, the cores disappear while blades persist in the archaeological record. Van Horn (1980) records the relative abundance of blade cores in the Argolid and the accompanying plethora of blades. This contrasts with the situation at Servia in Macedonia where blades seem to have been imported already made since no cores were retrieved during the excavation (Watson 1983:122). A similar condition seems to have existed on Crete, with cores and blades at Mochlos, but only blades at Debla and Myrtos (Warren and Tzedhakis 1974:332; Warren 1972:326-328). What we find is that, apart from one or two gateway communities, the distribution of obsidian is relatively uniform throughout the individual regions. In addition, the pattern appears to be the same between regions and suggests that the ESMs attained a certain internal consistency. For example, Bennet (1990:199-200) argues that the palaces of Crete were indigenous developments and that, despite strong ties among them, no one center held hegemony over the others.

The Linear B tablets from palace archives, especially those of Pylos and Knossos, provide considerable detail on other facets of the internal economic system. Chadwick (1976) has reconstructed many aspects of Mycenaean life from these documents. The tablets from Pylos indicate that the state was composed of a series of communities (*damoi*) intimately tied to the palace. The king (*wanax*) headed a social hierarchy in which land was assigned by title. Chief-tenants and sub-tenants administered and worked the farm land and produced substantial amounts of wheat and barley. A significant portion of the crop was transferred to the palace storerooms, from which rations were meted out to slaves and others who labored in the palace workshops. In times of need the palace stores sustained a significant number of the region's inhabitants. Other agricultural products involved in this redistributive system were olives, wine, figs, honey, and livestock (Chadwick 1976:116-128). The image that emerges from the texts is of a centralized system in which land tenure depended on one's relation to the palace. Whether one looks at Pylos, Knossos, or Mycenae, the systems exhibit a considerable degree of homogeneity. Agricultural products found their way into the central storehouses and lesser quantities then went back out through the various channels. An important question is whether these palace economies constituted market systems. There is no evidence of markets in the Linear B texts, but these deal only with the flow of goods into and out of the palaces. There is reference, however, to private property (Chadwick 1976:117), and there is a stress on profit, whether from crops or secondary animal products, especially wool. In addition, it is hard to imagine that the residents of the villages and hamlets did not periodically gather to exchange what surplus remained after the palace "taxes" were paid. Chadwick (1976:158) suggests some markets existed, but he questions the existence of a regular merchant class. Some recent work in the Pylos region suggests the presence of at least two tiers in the Mycenaean palace economies. While the palaces regulated the manufacture of bronze items and some pottery, the elites evidently paid little attention to more mundane activities such as flaked stone tool production (Parkinson 1997). It seems that the palace administration could not manage all aspects of the economy, so it focused on those elements the elite deemed most profitable.

Intermediate System

The interchange of material from island to island in the Aegean best represents this level of the Aegean world-system. Through this system, products peculiar to specific parts of the Aegean found their way to all corners of the archipelago. In addition, the more productive areas, such as Crete, found outlets for their surplus. The much-debated question of a Minoan thalassocracy in essence asks whether

the Cyclades, Dodekanese, and the Greek mainland were peripheries under the core domination of Crete. Although it was not phrased in WST terms, Evans (1921) provided an early expression of this perspective. He believed that Mycenaean civilization not only received its generative stimulus from Crete, but also that the mainland was under the political, economic, and artistic sway of the Minoans. When Wace (1949) and others demonstrated the independence of Mycenae, the way was opened to a more interactive model of Aegean BA economy. The archaeological record indicates a symmetrical economic relationship among many of the settlements, but there is also evidence that Crete's "pull" created some imbalances. In the second millennium B.C., Cycladic culture was a rich fabric of large settlements, unique expressive art, and material prosperity. Much of that prosperity probably derived from the fact that the various islands served as way stations for commerce between Crete, the Greek mainland, and areas to the east. The "Western String" exchange system proposed by Cherry and Davis (1982) tied Kea, Melos, and Thera into a trading relationship with Attika and Crete. From Laurion in southeastern Attika came lead used for rivets, plugs, and waterproof linings for storage bins, and silver, an important medium of exchange in the entire region (Weiner 1991a). In the other direction went Minoan pottery, various manufactured status goods, and probably woolen textiles (Finley 1981:37-38). As the system of trade became increasingly important to Crete, evidence for Minoan infiltration of the Aegean increases. There is a Minoanization of pottery, town-planning, and artistic expression in some important sites, such as Akrotiri on Thera and Trianda on Rhodes. From such evidence, Weiner (1984, 1991a:31) argues for the presence of many Minoans or their descendants in the Cyclades and Dodekanese, but the nature of the contacts "may include casual, unofficial, small-scale migration involving merchants . . . or an expanding Minoan elite seeking to carve out baronies, or a Cretan nobility exercising loose diplomatic control." The Aegean intermediate or regional world system benefitted many local communities and engendered, at most, a loose confederation within which Crete was unable to exercise hegemony even though her dynamic economy and elites generated much of the demand for goods that raised production levels and stimulated trade. While certain individuals may have desired to control the system, they could not fully exploit it because of the number of middlemen, and the relative isolation on so many islands.

Long-Distance System

The trade in obsidian and certain other commodities seems to have been limited to the immediate circum-Aegean region. Other items, however, traveled much further and brought the Aegean world into contact with Near Eastern

civilizations and peripheral zones. A wealth of evidence has appeared from the hold of a Late BA (ca. 1400 B.C.) shipwreck excavated by George Bass and his colleagues (1986, 1989; Pulak 1988). The Ulu Burun wreck, off the southwest tip of Anatolia, was a merchantman returning from an expedition to the Levant and Cyprus. The ship contained both raw and manufactured goods. In the former category are copper and tin ingots in the ox-hide shape, spherical glass ingots, unworked elephant and hippopotamus ivory, orpiment (arsenic trisulfide—a pigment), myrrh and frankincense (Bass 1986), and two logs of Egyptian ebony (Pulak et al. 1992). Foodstuffs included pomegranates, acorns, figs, grapes, olives, almonds, safflower, wheat, barley, pulses, coriander, sumac, and probably wine and olive oil (inferred from the great number of amphorae); the cargo also included an estimated one metric ton of terebinth resin, used in the production of aromatic oils and emollients (Bass 1986; Haldane 1993; Pulak et al. 1992). The finished products included Cypriot pottery, Syro-Palestinian pottery, gold and silver jewelry of Canaanite form, bronze tools and weapons, hematite weights, stone artifacts, beads of faience, glass, and amber (Bass 1986), two Near Eastern (Kassite) cylinder seals, and a gold scarab with an inscription indicating an Eighteenth Dynasty Egyptian origin (Bass et al. 1989). The ship was travelling east to west at the time it met disaster. Pulak (1988:36-37) suggests the ship had a Mycenaean origin, with landfalls at Syrian ports (e.g., Ugarit), and Cyprus; it may have been headed for Rhodes or the Anatolian coast, with a high probability that much of the copper was destined for Crete; a subsequent continuation to Egypt is a possibility. An Aegean-Egyptian trade connection has been well established. In Egyptian texts and funerary art, individuals identified as Keftiu, and dressed like Minoans, are depicted delivering goods to the Pharaoh and other lords. In addition, a substantial amount of Minoan pottery appears in Egyptian contexts (Kemp and Merrillees 1980). What is clear is that the Ulu Burun ship was not unique, and that an extensive network connected the Aegean directly to North Africa, the Levant, Cyprus, and the Anatolian coast. Beyond the direct ties, indirect trade linked the Aegean with the Anatolian interior and Mesopotamia.

The metals trade is the best example of the international commerce in which Aegean peoples engaged. Borrowing from Kohl, I would suggest the existence of an Aegean or Eastern Mediterranean metallurgical province that clearly represents a world-system, but one with a core-core relationship. Sherratt (1993) has argued that bronze was the critical commodity whose liquidity facilitated the integration of regional exchange systems; elite demand for bronze greatly stimulated metal production. Bronze was a critical resource in the BA Aegean because it provided weapons, tools for the construction of the great palaces, and prestige objects (Weiner 1991a:22, 1991b:327). Weiner (1991a:23) contends that the economic and political security of the Minoan elites depended on bronze, and thus the

procurement of the metal "would have been the object of intensive search, planning, and investment." Edens (1992:126) makes a similar argument for the Mesopotamian world-system. He suggests that the shift from chert to copper or bronze sickles and other tools reflects increased economic and probably political centralization because metals are rarer and more difficult to obtain. In addition, he argues that luxuries became necessities in the Persian Gulf trade. Several questions arise from Edens' argument: Did people have to accede more to the demands of the elite, who controlled the metal trade? Did trade in certain materials, especially metals, become institutionalized? To answer such questions, which place trade in its larger cultural context (Edens [1992:134] argues that trade is just one facet of core-periphery relationships and cannot be comprehended without consideration of warfare, diplomacy, cultural hegemony, and the social contexts of production and consumption, much in the way that Chase-Dunn and Hall [1991] argue for the nested nature of these relationships), one must consider the procurement, production, and consumption systems. I now turn to a consideration of each of these components of the Aegean economic system.

Procurement required extensive contacts. The Aegean has only a few large sources of copper. Lead isotope analyses (Gale and Stos-Gale 1982) have identified several key sources for BA artifacts; these include Kithnos, Sifnos, Laurion, and Cyprus, with the latter two by far the most important by the Late BA (but see Budd et al. 1995 who dispute the interpretation). The other critical component required to make a good bronze alloy is tin, which is much rarer than copper. There is considerable debate about the sources of the tin used in the manufacture of Aegean bronze. Yener and others suggest that the deposits near Kültepe in Anatolia were mined in the BA, but Muhly and others disagree. Weiner (1991a:23) suggests that three possible island chains comprised the major routes in the Aegean, especially Minoan, search for copper and tin. One was to the north through Thera, Naxos and Kea to Laurion—Cherry and Davis' "Western String." A second went east to Cyprus and on to the Levant, then perhaps on to Mersin in southern Anatolia, with stops at Kasos, Karpathos, Chalki, and Trianda (Rhodes). The third route followed the west coast of Anatolia to Knidos, Iasos, Miletos, Teichiussa, then to Troy by way of Samos; stops on this route could have included Kalymnos, Telos, Nisyros, Astypalaia, and Kos. Obviously, the Aegean merchants merely bartered for ingots at the various ports of call. The Ulu Burun wreck gives us an indication of the quantities involved. The ship was carrying about 300 ox-hide copper ingots (average weight: 25 kg) and a dozen tin ingots. These quantities surpass those recorded in many ancient Near Eastern texts (Pulak 1988:34-35). If we assume that this shipment was large, but not unique, we get some idea of the scale of the metal trade.

A second, but equally important, problem in evaluating the trade network is the administration of the system. It is clear that by the Late BA, Crete and the mainland had well-developed palace bureaucracies with a major interest in the metal trade. But did the palaces regulate and subsidize the long-distance trade or did independent merchants undertake the ventures? Branigan (1982) suggests that there was freelance trade in metals. I agree with Weiner (1987:264) that the role of copper, bronze, and other metals was of such importance to the elites that the expeditions were planned and subsidized by the palaces. The importance of copper and bronze in particular has already been discussed above. There is clear evidence for privileged access in the distribution of bronze artifacts. Just as significant is the evolution of written scripts by which the palaces administered the metal trade. Some have argued that the administrative system based on seals and writing was borrowed from the Near East as a result of commercial contacts. While there is no doubt about Aegean familiarity with Near Eastern peoples and products, the process of diffusion is complex. It is important to note that when Cyprus becomes a major supplier of copper to Crete, people on the former island opt for Minoan Linear A rather than cuneiform as the administrative script (Palaima 1989; Weiner 1990:236). As Weiner (1987:263) has stated: "Any amount of trade at a given time can take place without writing, but both complex administration and investment *over time* require literacy. Providing ships and goods for extensive overseas trade involves an investment over time." Thus, the Aegean world system involved the emergence of social hierarchies, but none of the major trading partners had the ability to dominate the others; thus there was no development of a classic core/periphery dependency relationship.

Production involved several different levels. Smelting was often performed at or near the quarries. Alternatively, certain sites intermediate between the inland quarries and the coast provided this service; for example, the site of Pamboulari tis Koukouninas near Athienou in central Cyprus is some distance from both the copper-bearing mountains and the sea (Dothan and Ben-Tor 1983). Keswani (1993) argues that there were eight copper-producing polities on Late BA Cyprus, and that these centers provided raw material for the Aegean. The ingots were then transported to coastal areas (donkey caravans are mentioned in some texts) and transhipped to various Aegean locales. Transformation into finished products took place under the watchful eye of the palace administrators. The best evidence for this system comes from the tablets at Pylos. These tablets were meant as only temporary records on unbaked clay; the conflagration that destroyed the palace ca. 1200 B.C. fortuitously fired the documents and made possible their preservation. The tablets thus provide inventories for one season, or at best, one year in the palace system. Scribes recorded the quantities of bronze allotted to bronzesmiths in the palace and in surrounding communities from palace stores. A

system of weights and fractions permitted accurate recording of the quantities so assigned. Metalsmiths may have emerged as specialists in the Middle BA; there is a smith's shop at Malthi (Messenia) and possibly another at Lerna (Argolid) in the pre-palatial period on the mainland (Vermeule 1964:75, 228). Each tablet in the Jn series from Pylos provides a place name, a list of the smiths and the quantity of bronze allotted to each, and a total; there is commonly another list of smiths who received no metal. It seems that approximately one-third of all the smiths were not working metal at the time tablets were written; the remainder may have been involved in subsistence activities, and this suggests the presence of part-time specialists who could be called upon when conditions required a larger professional work force. Chadwick (1976:140-142) estimates that there were close to 400 smiths in the Pylos kingdom. Palace control of the metal industry is suggested not only by the disbursements recorded in the tablets, but also by the concentration of smiths in certain areas, with up to 26 in one locale. The amounts of bronze assigned to each smith are relatively small, with a range from 1.5 to 12 kg and an average of 3-4 kg. Total quantities are significant: one tablet records 1,046 kg and another 1,562 kg. The artisans fashioned a wide range of artifacts from bronze: pots, cups, braziers, knives, axes, adzes, tweezers, razors, saws, chisels, awls, scale pans, lamps, and a wide assortment of military equipment, including daggers, swords, spearpoints, arrowheads, armor, helmets, and bindings on chariot wheels (Chadwick 1976:142-143). Estimates suggest that from a ton of bronze the smiths could manufacture 534,000 arrowheads or 1,000 helmets (Vermeule 1964:228).

Just as important as productive capacity are the relations of production. As mentioned above, the smiths were under palace direction. They worked, in large part, at the sufferance of the central administration, which hoarded the supply of raw materials. Despite the quantities mentioned in the tablets, bronze was generally in short supply and palace officials regulated its flow. Chadwick (1976:141-142) detects a distinct note of urgency in the Pylos system of rationing. Bronze was in relatively short supply and its use was prioritized, with military concerns primary. Tablet Jn 829 details contributions of bronze requested by the palace from local governors in order to make spear and javelin points. One assumes that the bronze was gathered and then distributed to the smiths, who melted down the artifacts and produced the weapons, which were, in turn, returned to the palace. Other evidence for the existence of a crisis is found on tablets (An 657, An 654, AN 519, An 656, An 661) that mention groups of coast watchers "guarding the coastal regions" under the direction of royal officials; the subsequent destruction of the palace is mute testimony to the inability of the administration to handle the situation (Chadwick 1976:175-177). The bronzesmiths can be classified as attached specialists whose role as artisans was

subsidized, directed, and in large part developed because of the needs of the palace elite. The palaces would have supported other specialists, such as potters, fresco painters, architects, stonemasons, and lapidaries, the bulk of whose products ended up in royal storerooms. To be certain, there must have been other artisans, full-time and part-time, who provided various goods and services to non-elites, but economic specialization seems to have been rather centralized.

Metal artifacts were largely consumed by elites. Large quantities of bronze swords, daggers, and armor have been found in Mycenaean and Minoan tombs. These objects probably represent the military nature of the hierarchy that held sway on the Greek mainland and at Knossos in the Late BA. Gilman (1981) has argued that such objects in the European BA bespeak societal domination by a warrior class. Nothing from the Aegean contexts seems to dispute that claim. The Shaft Graves in Grave Circle A at Mycenae date to the early Mycenaean (early Late BA, ca. 1550-1450 B.C.) and provide good evidence for the concentration of wealth by the elite. A partial inventory from Shaft Grave IV in Grave Circle A includes 3 gold masks, 2 gold crowns, 8 gold "diadems," 27 swords, 5 daggers, 16 knives, 5 razors, 22 bronze vases, 38 arrowheads, 683 gold discs and repoussé ornaments (Vermeule 1964:88-89); there are a host of other objects, but even this incomplete list of the metal offerings demonstrates the exalted status of those interred. In addition to the bronze, other materials of foreign origin were found in this grave: ostrich eggs (Nubia), lapis lazuli (Afghanistan by way of Mesopotamia), alabaster and faience (Crete), ivory (Syria), silver (Anatolia), and amber (Baltic region) (Vermeule 1964:89). Excavations at Aegean BA sites over the past 125 years have revealed a decidedly skewed distribution of such materials. The luxury items appear in abundance in tombs and palace destruction levels at the major centers, and in smaller amounts in large residences at secondary sites. In addition to domestic consumption, metal artifacts were probably also key exchange items in trade among the Aegean polities and with the more distant members of the world-system (e.g., Egypt, Anatolia, Syria). Chadwick (1976:141) argues, correctly I believe, that the suggested number of 400 smiths in Pylos produced a significant surplus, beyond domestic (elite and non-elite) needs, of bronze objects, many of which were exported by sea. The foreign trade, especially that in metals, was central to the Aegean BA economy and its disruption could have had disastrous consequences for the palace administrative systems. Such a disruption did occur in the twelfth and thirteenth centuries B.C. and the entire Eastern Mediterranean world-system suffered a serious decline. The Aegean branch of that system did not recover. Many scholars cite the invasions of the so-called Sea Peoples, recorded in Egyptian documents, as the series of events in the Late BA that reflect the dislocation of many people in the Eastern Mediterranean; the movements of these people in their search for

new homelands upset the political and economic system in the region (Knapp 1992). The collapse of the trade system led to the decline of the Aegean elites. Perhaps more important than the exchange system per se was the decline in production, with its stimulative impact on society (Harris 1991:21-23).

Conclusion

In sum, the Aegean trade system was extensive and administered by the palaces in the Late BA. It brought into contact a variety of cultures with both well-developed economies and an appetite for prestige and utilitarian goods. Because of the distances involved and the lack of direct control of sources of raw materials, no dependent core/periphery relationships emerged between the Aegean and the other major players (Egypt, Mesopotamia, Levantine states). This does not minimize the importance of the world-systems perspective for providing a theoretical approach to understand the context of interaction. Wallerstein's original formulation is flexible enough to accommodate the somewhat different economic conditions of antiquity.

What is clear is that there was in place an interaction sphere with several different levels. The local system involved the exchange of materials within the ESMs. The Aegean system encompassed an interaction sphere in which the mainland and islands participated. With the exception of possible Minoan colonists on some Aegean islands and the Late BA Mycenaean occupation of Knossos, the Aegean core polities (e.g., Mycenae, Knossos, Pylos) did not maintain a permanent residence in areas from which they derived materials. The extraction of raw materials was locally controlled; contact with the Aegean ESMs stimulated production, but did not evidently lead to political domination. The Eastern Mediterranean world-system was an international interchange that involved the transfer of both bulk goods and preciosities to and from the Aegean, Egypt, the Syro-Palestinian coast, Cyprus, and Anatolia. Direct Aegean contacts were limited to coastal areas in these other lands. The network, however, did extend far beyond the littoral zones. Tin came from the interior of Anatolia, ostrich eggs and gold from as far as Nubia, aromatic ointments from the Arabian peninsula, cylinder seals from Mesopotamia. There is some evidence to suggest that the procurement of the raw materials in some of these areas was accomplished by way of direct core exploitation of peripheral areas. For example, cuneiform tablets indicate that Assyrian traders established an outpost at Kanesh (Kültepe) in central Anatolia ca. 1950 B.C., and from this site exported tons of copper to Mesopotamia. The texts also explain that Kanesh was the central node in a series of nine Assyrian outposts in the region (Özgüç 1963). Furthermore, if the name "Kaptara" refers to Crete, as many scholars believe, then the mention in a Mari tablet of a man from this area as the recipient of tin from the east (Weiner

1991b:328) establishes a link between the Mesopotamian and Aegean world-systems. While the relationships among the participants in the interlocking exchange systems varied, there was a clear reliance by urban centers on products or materials available in marginal zones. The inability, in most cases, of the core states to muster sufficient manpower to subjugate the peripheral areas precluded the development of a dependent role for the latter. With the modifications mentioned above, the term world-system still serves well to characterize the internal and external relations of the late prehistoric Aegean area in the Bronze Age.

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11

World-Systems Theory, Core-Periphery Interactions, and Elite Economic Exchange in Mississippian Societies

Robert J. Jeske

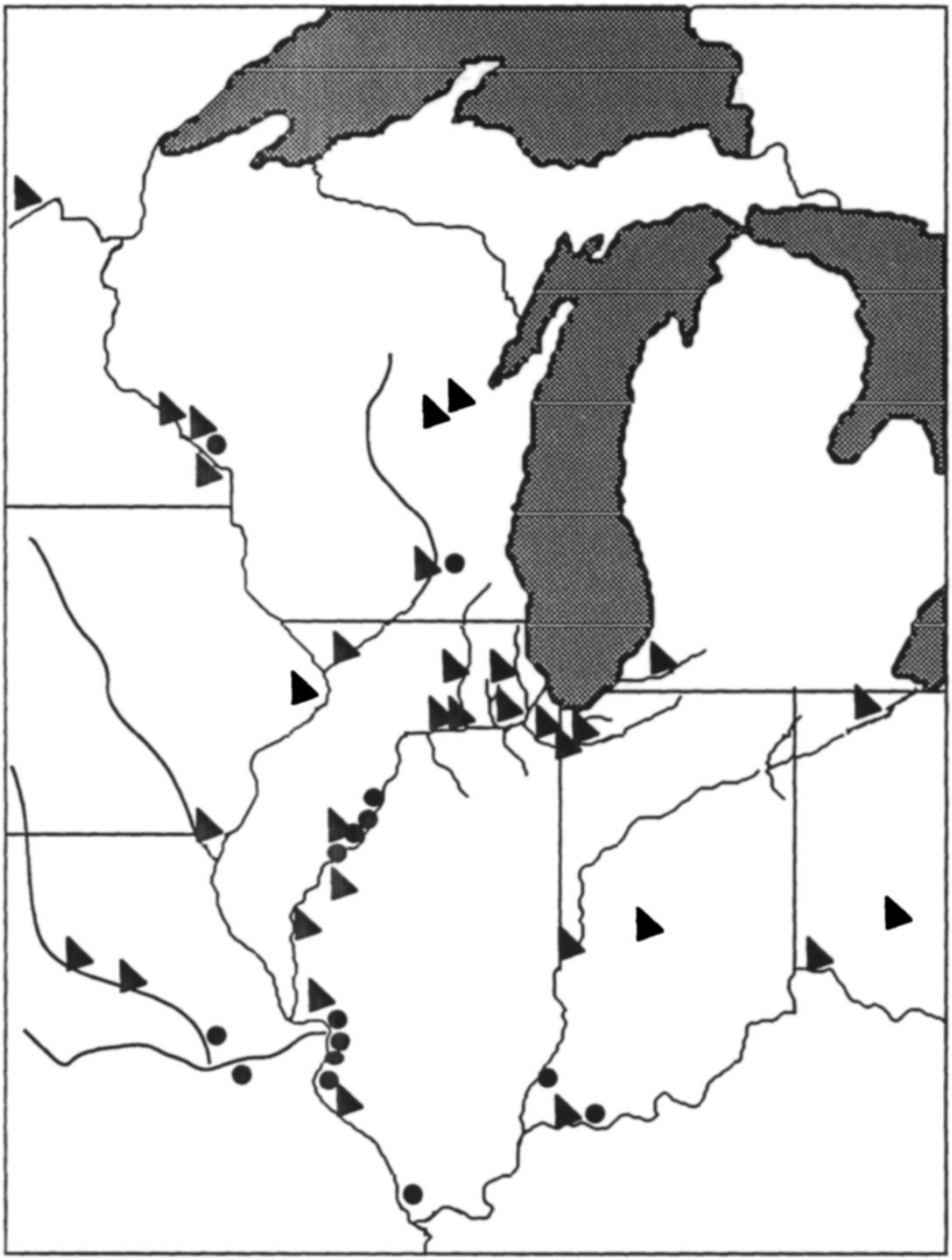
Introduction

Archaeologists have long sought an explanation for the rise of Mississippian society in the major river valleys of the American Midwest and Southeast between A.D. 1000 and 1450 (Smith 1978). Over the years, our explanations have changed with the changing fashions of then-current theories of cultural evolution. From diffusion to cultural ecology to economic models of redistributive exchange, we have attempted to put a finger on the causal variables involved in the production of certain ceramic wares, the construction of earthen platform mounds, and the large and highly organized residential and ritual sites of these late prehistoric people. None of these models have proven completely satisfactory, failing at one level or another to account for the complexity of Mississippian intergroup interactions revealed by the archaeological record. With the emergence of world-systems theory (WST) (Wallerstein 1974) within the anthropological community, it is only natural that archaeologists should attempt to use it as a way to gain some insight into this long-standing archaeological problem (cf. Peregrine 1991). In this study, I will attempt a critical examination of WST as it might pertain to Mississippian society. A brief review of what we know about Mississippian social and political economy is necessary before we explore how well WST works to explain what we see in the Midwest and Southeast United States between A.D. 1000 and 1450.

Traditional View of Mississippian Social-Political Economy

Middle Mississippian is a term used to describe an archaeological culture that flourished in the major river systems of the Midwest and Southeast United States between A.D. 1000 and A.D. 1450 (Figure 11.1). Middle Mississippian society is traditionally viewed as a ranked chiefdom level society (Phillips and Brown

1978). The social system is seen as pyramidal, with ruling elites at the top, a mid-level grouping of semi-elites and a larger population of non-elites. Data for this demographic makeup are provided by studies (e.g., Peebles and Kus 1977) that have demonstrated a correlation of grave goods and health indicators with spatial location in cemeteries. In addition, the distribution of exotic or non-local artifacts in graves is usually skewed towards males, and there may be a correlation of materials within genetically related clusters of individuals.



● = Middle Mississippian ◣ = Upper Mississippian or Caddoan

Figure 11.1. *Locations of major Mississippian and Upper Mississippian sites in the Upper Midwest.*

Settlements are likewise seen as hierarchically ordered. The American Bottom of the Mississippi River valley is seen as the archetypal setting (Figure 11.2): Cahokia (15.5 km^2), with its giant Monk's Mound and some 120 other mounds is considered the central place or first-line community; surrounded by smaller, but still impressively large second-line centers such as the Mitchell, East St. Louis, St. Louis Mounds, and Lunsford Pilcher sites; which are in turn the focal points for smaller single-mound third-line sites; around which cluster numerous village or hamlet sites that make up fourth-line communities (Fowler 1978; Hall 1991). In the American Bottoms and surrounding regions, these hamlets typically have anywhere from one to four structures, generally considered to represent single, or at the most, a few related households (Mehrer and Collins 1995; Rogers 1995), while in the southeast, the number of structures at the base-line community appears to be somewhat higher (Sullivan 1995).

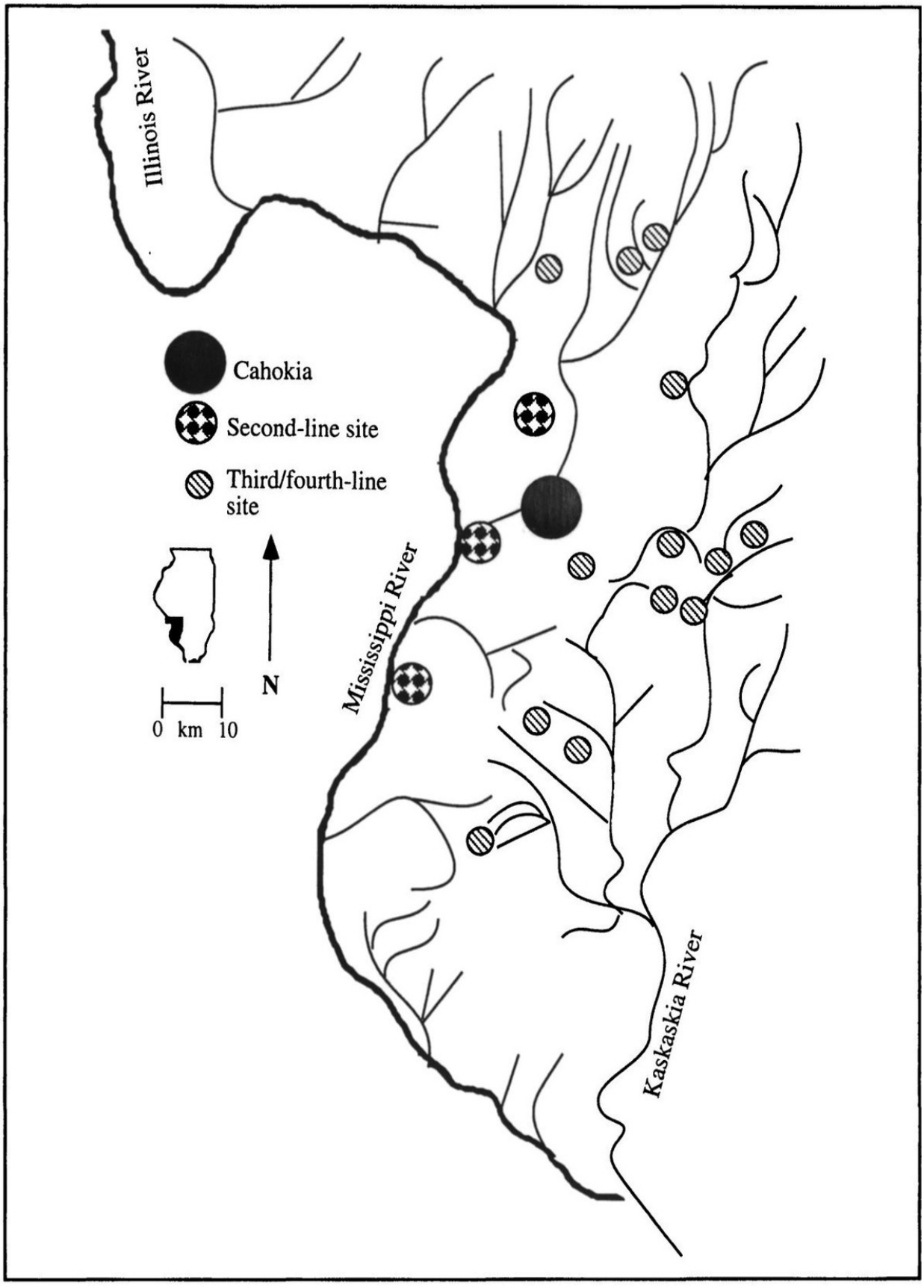

Illinois River
Cahokia
Second-line site
Third/fourth-line site
N
0 km 10
Mississippi River
Kaskaskia River

Figure 11.2. American Bottom core area, adapted from Woods and Holley (1991:52) by permission of the University of Illinois Press.

The subsistence economy is generally depicted as a maize (*Zea mays*) and squash (*Cucurbita pepo*) agriculture supplemented by wild plant gathering and hunting. Plants such as maygrass (*Phalaris caroliniana*), sunflower (*Helianthus annua*), goosefoot (*Chenopodium* sp.), erect knotweed (*Polygonum erectum*), little barley (*Hordeum pusillum*) and berries (e.g., *Vaccinium* sp.) were all part of the Mississippian diet. Beans (*Phaseolus* sp.) are a later introduction in some areas of the Mississippian world, but are not found in the American Bottom. Tobacco (*Nicotania rustica*) was grown for ritual or recreational purposes (Parker 1987). While irrigation was not used, at least some fields were improved through the use of a raised field technique to aid in drainage and frost protection (Riley 1993). Aside from the dog (*Canis familiaris*), no animals are known to have been domesticated.

There is biological and archaeological evidence for warfare. In addition to skeletons bearing evidence of violent death (Milner et al. 1991), some Mississippian sites are stockaded (Goldstein and Richards 1991), and there are symbolic representations of pottery and shell engravings, suggesting that a warrior class or at least some form of warrior veneration existed (Phillips and Brown 1978). The archaeological evidence is supported by ethnohistoric data from southeastern groups such as the Natchez, who were following this basic pattern at the time of European intrusion (Steponaitis 1978). The ethnohistoric data do give the impression that high-level elites at larger sites exerted influence, if not control, on individuals at other locations. However, none of the historically known groups approach a state-level of social and political complexity. In particular, complex bureaucracies with the power to coerce taxation and draft an army were not features of the social and political structures of these groups. It is still a matter of debate whether the Mississippian world of 200-400 years earlier contained an incipient state-level sociopolitical system.

World-Systems Theory and Mississippian

As defined by Wallerstein, the world-systems perspective emphasizes the asymmetrical political and economic exchange between a highly developed core and a lesser developed periphery. The core is highly developed both economically and politically, with centralized authorities supporting an exchange system that encourages the accumulation and investment of surplus (Stein 1993). These elites

control the flow of goods between the core and periphery through colonial administration or control of local elites, who are dependent upon core elites for their own power. The periphery provides a flow of staple goods and raw materials to the core in exchange for value-added or finished commodities.

A number of scholars (e.g., Chase-Dunn and Hall 1991; Schneider 1991) have argued that Wallerstein's initial formulation of WST, designed to explain a European capitalist environment, is probably inadequate for non-state societies. For one thing, Wallerstein's view assumes that there is inequality inherent in the core-periphery exchange, but Chase-Dunn and Hall would like to see WST account for those situations where exchange inequities are not readily apparent. In order to provide for a more flexible approach, Chase-Dunn and Hall offer a typology of possible world-systems forms covering social-political-economic situations from band-level, kin-based lineage systems to fully industrialized state-level capitalist systems. To denote the more generalized approach, they favor the use of the term core-periphery or even more generically, intersocietal interactions, rather than Wallerstein's world-systems. Their eclectic approach to world-systems allows one to operationalize expectations for what a world-system would look like on a case by case basis. Again, in order to be flexible enough to encompass as much variation as possible under the rubric of core-periphery, they break core-periphery interactions into two larger groups: core-periphery differentiation, where a large group interacts with a smaller group; and core-periphery hierarchy, where the core demonstrably dominates the smaller group economically, militarily, politically, or ideologically.

Based on the previous discussion of what we think we know of Mississippian society, our case study here falls under Chase-Dunn and Hall's taxon of chiefdom —a non-state, but stratified society. There is probably little controversy on this point, but we need to determine whether the interactions between Cahokia and surrounding smaller polities was hierarchical or differential in nature.

In a hierarchical system, the core creates the periphery by pulling it into the exchange system as a politically and economically dependent area (Stein 1993). This creation of a dependent area implies some form of coercive power over the peripheral area, either through military threat or some enticement so powerful that the population in the targeted area accepts their subservient role in the exchange system. In effect, the core must extend to the periphery an offer that they cannot refuse.

Stein suggests that a hierarchical system requires three basic assumptions about the relationships between the core and periphery. First, there must be a fundamental power asymmetry such that the core can dominate the periphery. Second, the model assumes that as a result of this power asymmetry, the core can

control an exchange system crucial to its existence. Third, this exchange system must structure all other aspects of the economy in the peripheral society. In the particular case presented here, we envision a chiefdom-level society, with a small cadre of ruling elites based in Cahokia who have political, economic, and marriage alliances with each other as well as with elites in outlying areas of the American Bottom and beyond. For a hierarchical model of core-periphery relations to work, we need to show that the core elites had the capability to coerce other elites, as well as non-elites, into an unequal system of economic exchange. Such coercive power could conceivably consist of military, economic, or ideological control of access to desired and/or necessary resources. We can examine Mississippian social relations at Cahokia to see if our example meets these three criteria for a hierarchical core-periphery relationship.

World-Systems Theory and Mississippian: Does it Fit?

When placing Mississippian culture into the taxon of core-periphery interaction, the problem of area bounding (i.e., the geographical extent of the system) is immediately apparent. The problem of bounding core-periphery hierarchies has been discussed by Chase-Dunn and Hall (1991) and the problem is a significant one in our particular case study. Cahokia and its immediate environs are clearly unique and represent a core area. But the extent of the core, and the further extent of the periphery are much less definite.

The distribution of Middle Mississippian sites in the Midwest shows that, outside of Cahokia and the American Bottom, the lower Mississippi, the central Illinois, the lower Wabash, and the Ohio Rivers all contain major habitations, suggesting a large-scale, far-flung geographic extension of Mississippian political and economic hegemony (Figure 11.1). It is not entirely clear, however, that the entire American Bottom would qualify as a core. It may be that Cahokia and its immediate suburbs were a core, with the American Bottom region a semi-periphery and the sites in the Illinois, Wabash, and Ohio river valleys the periphery. However, it may also be that the entire American Bottom is the core. If Cahokia and the American Bottom is the core, where are the semi-periphery and periphery? The semi-periphery and periphery might well include those sites in the river valleys just mentioned. Major sites in this periphery or semi-periphery include the Angel Site in Indiana (Black 1967), and Dickson Mounds in the Central Illinois river valley (Harn 1980).

There is also the Caddoan area of Oklahoma and Arkansas, in particular the Spiro site (Brown et al. 1978). Caddoan sites share many Mississippian traits, yet

retain a regionalization that suggests they might be part of a Middle Mississippian periphery, or again, at least semi-periphery.

As a further wrinkle, there is a much larger extension of Mississippian into the north, east, and west, which archaeologists have termed Upper Mississippian. Sometimes referred to as Cahokia's Hinterlands (cf. Emerson and Lewis 1978; Mehrer and Collins 1995), it is quite possible that groups in these areas made up the true periphery of the Mississippian world. These are groups whose pottery shares many of the same motifs as Middle Mississippian, but who live at sites which are more similar to Late Woodland villages than to the hierarchical Middle Mississippian hamlet/town/city pattern, and which lack pyramidal mounds. Oneota and Langford are variants of this Upper Mississippian cultural phenomenon found in northern Illinois, northwestern Indiana, Wisconsin, Iowa and Minnesota. These groups were generally less dependent upon maize and more involved in a mixed economy of hunting-gathering and maize horticulture (Brown 1982, 1990; Jeske 1990; Pollack and Henderson 1992). Fort Ancient was a southern variant of Upper Mississippian found in central Indiana and Ohio. The Fort Ancient subsistence regime may have been somewhat different from that of Oneota and Langford, including a significantly greater reliance on maize agriculture, and later inclusion of beans, in the diet (Pollack and Henderson 1992; Watson 1988).

Of special interest is the site of Aztalan in southeastern Wisconsin (Goldstein and Richards 1991). This site is a seemingly Middle Mississippian settlement separated from the core by 500 km and surrounded by several different variants of Upper Mississippian and Late Woodland cultures. The site contains a platform mound and exhibits evidence for hostilities with its immediate neighbors. Aztalan has sometimes been considered either a colony of Cahokia or a trading center between Cahokia and its northern periphery (Barrett 1933; Gibbon 1974; Griffin 1960). Others (Fowler and Hall 1978) have suggested that Aztalan is not representative of direct Cahokian contact, but is a "hybrid resulting from interaction between Middle Mississippian and [local Woodland cultures]" (Hurley 1975, cited in Goldstein and Richards 1991). In a recent study, Goldstein and Richards (1991:206) assert that the site is an example of direct Cahokian contact, although the reasons for the contact are unclear. The site is located on the Crawfish River, which they argue places it in geographic context for movement of trade goods. However, there is no evidence for trade goods flowing through the site, and there are demonstrably many more strategic areas in the north if the Cahokians had wished to place a settlement for the control of trade goods from the Great Lakes region to the American Bottoms.

In fact, it appears that we may have a nested core/periphery phenomenon (Chase-Dunn and Hall 1991), with Middle Mississippian American Bottom sites, Middle Mississippian Central Illinois-Wabash-Ohio Rivers sites, Caddoan sites in Arkansas, and Oneota-Fort Ancient-Langford sites of Iowa, Minnesota, Wisconsin, northern Illinois, central Indiana, and Ohio all displaying varying degrees of peripheralization from the central place of Cahokia. Finally, there are hundreds of Mississippian sites on major waterways of the Southeastern United States, many of them large regional centers containing platform mounds, plazas and organized residential centers (Smith 1978). However, it is reasonable to assume that Mississippian was a multicentral phenomenon (Chase-Dunn and Hall 1991), and for the purposes of this study, I will treat these Southeastern sites as independent and separate sociopolitical units that had their own core-periphery interactions outside of any connections with Cahokia and the Midwestern Middle Mississippian sites. We do know that this is not entirely true; sea shells from the Gulf Coast are found at Midwestern Mississippian sites. There was some interaction between Cahokia and at least some groups to the south, although direct contact between Cahokia and Mississippian sites outside of the Mississippi valley proper is not definite.

Even if we ignore those "other Mississippians," taking a world-systems view of Midwestern Mississippian society is problematic, but teasingly plausible. Looking at Stein's first assertion about hierarchical systems assumptions, we must posit that the American Bottom area possessed a power asymmetry with its periphery. Judging by the size and complexity of Cahokia and its associated suburbs, a strong argument can be made that it certainly had a huge population relative to other inhabited areas in the American Bottom. The population numbers suggest that the Cahokia elite commanded significant potential power, assuming that institutions capable of organizing that population into active coordinated labor existed. The building of Monk's Mound, containing 623,040 cubic meters of earth, suggests that Cahokia's elite did possess the ability to organize large-scale labor-intensive activities. It is not unreasonable to suggest that Cahokia possessed the potential for an asymmetrical power relationship with its assumed periphery and semi-periphery. Cahokia itself could plausibly have controlled the American Bottom as part of its core.

But we also have to contend with the notion of power distance decay (Stein 1993). That is, how far can a core polity extend coercive power over peripheral areas? The short answer for Cahokia may be "not far." Ross Hassig (1992) has shown that the ability of the state-level Aztecs to throw their military weight around was bounded fairly tightly. The Aztecs had difficulties with groups as close as the Chichimecs, and did not have the ability to take on easily the Maya

city states of the Yucatan. To expect the Cahokians, who did not have nearly the population or social integration of the Aztecs, to defeat groups militarily in Minnesota, Ohio, Iowa, and Wisconsin stretches credulity.

Evidence for the degree and evolution of social integration at Cahokia and its environs is provided by Mehrer and Collins (1995). Based on excavations at the ICT-II tract at Cahokia, they show that during the Lohman Phase (A.D. 1100-1150) the residential community plan was highly structured and oriented on a central grid system, indicating a high level of community control by a central power. Centralized authority is perhaps best symbolized by the dramatic burials within Mound 72, where an aged male was laid out on a cloak of shell beads; several individuals buried alongside him are interpreted as sacrificed attendants. Four young males between the ages of 18 and 25, who were buried minus their heads and hands, with arms interlinked, are interpreted as an "honor guard." Also nearby, an ossuary contained the remains of 33 young women, interpreted also as sacrifices. It is conceivable that the aged individual buried with such ceremony, or someone like him, was a central authority capable of organizing the growth of the large ceremonial and residential site of Cahokia along a well-defined grid system.

At this time, population was expanding rapidly, and the "mound and town" centers characterizing the Mississippian settlement pattern in the American Bottom first appear. In the hinterlands (for Mehrer and Collins, the American Bottom excluding Cahokia's immediate environs), the Late Woodland settlement pattern of large villages is replaced by the hierarchical system with individual households or farmsteads as the base unit. Political and social control became centralized at this time as individuals left villages and moved into larger towns or smaller hamlets (Mehrer and Collins 1995:43). By the Stirling Phase (A.D. 1150-1200), however, with Cahokia's population at its maximum, the sociopolitical system already seemed to be segmenting. The same ICT-II tract at Cahokia shows that structures were no longer oriented on a central grid, and the residential area was separated from the central plaza and mound area of the site by stockade walls. More importantly, local residences were structured around their own mound and plaza complexes. Outside of Cahokia proper, differentiation of individual structures within farmsteads indicates local stratification. In sum, it appears that local communities were oriented to local elites rather than to a centralized authority (Mehrer and Collins 1995:47). As Cahokia and the American Bottom population declined through the following Moorehead and Sand Prairie Phases, it appears that local elite control continued at the household level, rather than as a centrally based system (Mehrer and Collins:57).

Even if we discount the direct authoritarian control by a single or small group of elites over the entire population, it is conceivable that Cahokia, because of its

sheer size and magnitude relative to neighboring Mississippian groups, might have been perceived as a credible military threat to far off groups. Core elites may well have been able to enlist or coerce significant military support through political-economic-marriage ties with local elites. Manpower necessary for significant military activity is readily available to elites in ethnographically known chiefdom-level societies—especially at the level of raiding (Keeley 1996). Warfare as persistent raiding is a pattern seen among non-state societies in the historic record. Historic Iroquois extended terroristic raiding parties far into the Illinois Country, for example, destroying the Grand Village of the Kaskaskia in the Upper Illinois River valley in 1680 (Brown 1961). The Miami, based in northern Indiana, maintained a long-standing blood feud with the Chickasaw of Georgia during the eighteenth century (Callender 1978).

Archaeological data suggest that Cahokians could conceivably have used intimidation through intermittent raiding as a coercive tactic. Data from mortality profiles and skeletal pathologies at a peripheral Oneota site in the Central Illinois River valley (Norris Farms #36) dating to the thirteenth and fourteenth centuries suggest that long-term, intermittent, small-scale raiding resulted in a high rate of homicides among adults (Milner et al. 1991). The site is contemporaneous with both Middle Mississippian sites and other Oneota sites in the Central Illinois River valley. Evidence for significant violence is also present on skeletons from the Fisher site, on the Kankakee River near Joliet, Illinois (Langford 1927). The Fisher site is a Langford and Oneota site, also occupied during the thirteenth and fourteenth centuries. Decapitated skulls and other evidence for violence were also recently recovered from the Tremaine site, a fourteenth-century Oneota occupation in the Mississippi River valley in west-central Wisconsin (Eric Hollinger, personal communication). While it is not known who their antagonists were, there is no doubt that raiding and warfare was a significant aspect of life in the Cahokia periphery and semi-periphery. Such violence can be seen as evidence of intergroup coercion.

Stein's second assumption, that because of this power asymmetry, the core elite were able to control trade, is much more difficult to ascertain. There is little evidence that peripheral areas were trading anything of economic importance to Cahokia (see also Emerson 1991). There is no direct evidence that American Bottom populations needed anything from the north and northwest.

The organization of settlements in the American Bottom strongly suggests that the population within the region itself was deployed in a manner that insured adequate agricultural production if we posit institutionalized redistribution of resources (Kelley 1978). Sites are located on the floodplain, terrace, and uplands in a way that minimizes risk from either flooding or drought. Potential failure in

one portion of the region could be made up by redistributing surpluses from another. Control of this redistribution has been argued by some to account for the rise of Cahokia and its elite (Fowler 1969). The need for redistribution of resources within the American Bottom, however, does open up the possibility that at least some agricultural produce may have been sent from the semi-periphery to the core area and rechanneled. It is also possible that dried bison meat may have been sent to Cahokia from peripheral sites. While such meat would be archaeologically invisible at Cahokia, bison kills indicative of more than local-scale consumption at peripheral sites would not be. A systematic investigation of Mississippian era bison kill sites on the plains with this hypothesis in mind might be in order.

In addition, faunal remains at Oneota residential sites in the Midwest suggest that it is possible that meat may have been traded to Cahokia. Kuznar (1994), in an ethnoarchaeological study of Andean herding communities, has demonstrated that faunal assemblages from sites of pastoralists who trade meat to agriculturalists show a "*charqui* effect." *Charqui* is dried meat sent to agriculturalists by pastoral producers. The production of *charqui* at pastoral sites yields a faunal assemblage that is heavily biased towards heads and lower limb bones. Animal portions associated with high meat:bone ratio are shipped; the low meat:bone ratio parts are retained at the pastoral sites for local consumption. A brief survey of the faunal remains reported from Upper Mississippian sites suggests that the *charqui* effect may have operated at some of these sites. Although Upper Mississippian groups are characterized as having a general subsistence economy (Brown 1982; Jeske 1990; Michalik 1982), and several data sets support this assertion (Breitburg 1992; Yerkes 1985), several reports from Upper Mississippian sites in Wisconsin and northern Illinois indicate a bias towards heads and lower limb portions in faunal assemblages (Neusius 1990; Styles and White 1993). However, the situation is far from clear, and a larger, more formal review of this evidence is suggested for future research.

Moreover, there is no evidence that Cahokians needed or desired dried meat. The fact that Cahokians did not grow beans, an important supplier of amino acids in a protein-poor maize-base diet, suggests that they had other protein sources, such as meat. Unfortunately, whether the protein source was locally hunted game or was imported as dried meat is not known, but it seems likely that a protein-stressed population would supplement a meat-poor diet with as many alternatives as possible.

An alternative economic commodity that may have been sent from the periphery to the core is slaves. Like dried meat, slave trading would be largely invisible in the archaeological record. Unlike bison hunting, there would be no

local production areas present in the periphery. Although it would be very difficult to see slave trading archaeologically, there is also very little ethnohistoric evidence that indicates clearly that slaves were an integral part of the Mississippian and historic Native American economy. War captives often became slaves, but active, large-scale trade in slaves is not recorded for Midwestern or Southeastern groups (Ritzenthaler and Ritzenthaler 1991; Snow 1995; Swanton 1946; Trigger 1990). It is not likely that slaving was an important, widespread, or frequent economic exchange between periphery and core.

Although Wallerstein was insistent that economically important goods are prime actors in core periphery interactions, Schneider (1991) and others have since argued that exchange in elite-controlled ritual paraphernalia may be more important than staples, especially in precapitalist economies. Peregrine (1991) has argued that trade in exotic or prestige goods was crucial for the evolution of Mississippian social complexity. He contends that control of exotic and prestige goods necessary for "social reproduction" by elite males provided an impetus for competition and eventual elaboration of the social system. Peregrine's argument is that the distribution of exotic goods does not reflect pure economic exchange or competition for material resources, but is actually a reflection of individual males' desire for greater prestige and acceptance into an elite hierarchy. Although he refers to his model as a world-systems approach, Peregrine actually harkens back to older models of kinship-based exchange as a basis for social complexity (Malinowski 1922; Rosman and Rubel 1971; Strathern 1971). Although Peregrine does not broach the topic, the power-prestige approach may also be used in a sociobiological context, in which males who garner status through economically nonoptimal but risky activities have increased access to women, enhancing their ability to reproduce themselves biologically (Chagnon 1988; Hawkes 1993).

In an attempt to show that Mississippian exchange was not centered around economic necessity, but was structured by elite power-prestige ties, Peregrine (1991) puts forth three major hypotheses: that core sites should have more exotic and prestige goods than peripheral sites, that adult males should control exotic and prestige goods and be buried with more of these items than others, and that goods should be directed by adult males to particular people or places. He tests his hypotheses by examining the distribution of shell bead artifacts, "exotic goods" (shell beads plus selected artifacts found in burials), and "prestige goods" (selected artifacts minus shell beads), in burials at four sites in the American Bottom and two sites in the Little Tennessee River area (Peregrine 1991:73). Unfortunately, the data at his disposal are inadequate to answer hypotheses one and three, so he uses his data from the six sites to test them indirectly. Despite

Peregrine's best efforts, most of his tests are statistically insignificant, leaving his hypotheses unsupported by the archaeological record.

If the data do not allow one to demonstrate that elites controlled trade using Peregrine's example, is it possible at least to discuss the distribution of trade items in the Midwest? In fact, there is evidence that certain classes of exotic or ritual-associated artifacts were exported from Cahokia to the north and northwest. In particular, Ramey Incised pottery (Figure 11.3), long-nosed god masquettes, and marine shell ornaments seem to be associated strongly with a Cahokian influence or presence on sites in the semi-periphery and periphery (Hall 1991). Trade in these exotic or ritual items can be seen as elites from Cahokia cementing relationships with local elites in the periphery, or alternatively, these items reflect colonial administrators in the periphery.

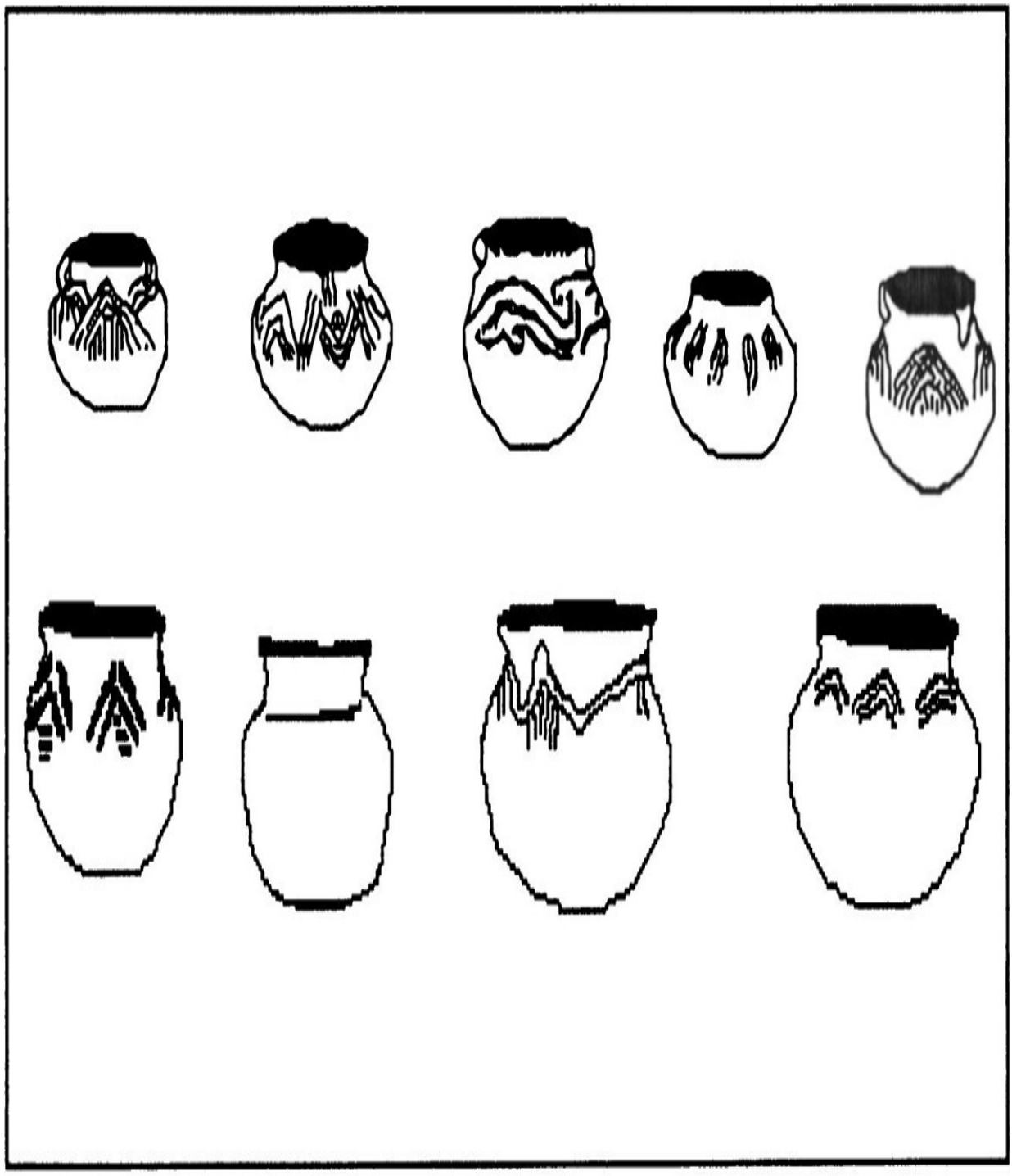


***Figure 11.3**. Top row: variants of Oneota pottery. Bottom row: variants of Ramey Incised pottery.*

In addition, there is some evidence to suggest that the core/peripheral trade was asymmetrical in that some ritual items seem to be sent to the periphery, with little return to the core. John Kelley (1991) notes that when we examine the distribution of exotic artifacts in Cahokia and its northern periphery, we see that trade items made from materials to the south of Cahokia are found at Cahokia and its northern periphery. These artifacts include marine shells and hoes made from a particular, highly localized material called Mill Creek Chert. However, northern artifacts are not found to the south of Cahokia. To Kelley, this pattern suggests that the American Bottom appears to be a conduit, or gateway community for the movement of southern goods such as marine shell northward. Kelley suggests that the Cahokia development begins as an outpost on the northern edge of a southern core area, and eventually is elaborated through its function as a gateway for the movements of these ritual items. However, his view begs the question, what is being returned to the southern core? If almost everything is flowing in one direction, there is no trade; there is distribution without economic context.

Some northern trade items, however, may have gone south to Cahokia itself. For example, long-nosed god masquettes are made from shell or copper. Several copper examples come from the American Bottom, while masquettes made from shell are found in the periphery. It is usually assumed that copper came from mines around the northern Great Lakes—either the material or the masquettes themselves were traded from the periphery to the core. If it was the material, then the value-added items—the masquettes themselves—remained in the core and were not sent back out to the periphery as we would expect if there was an asymmetrical power relationship controlling trade. In the case of the masquettes, the distributional data suggest that the movement of masquettes was conditioned by factors other than direct control by a core elite. As an additional problem, native copper nuggets are occasionally found in Mississippi River valley gravels. James A. Brown (personal communication) has suggested that all of the known copper artifacts found at Cahokia could easily have been produced from one large nugget obtained locally and opportunistically. Perhaps of greater importance, copper is not found at Cahokia until after the elaboration of Mississippian social complexity and the major period of growth at the site. If this is the case, it was clearly not the accumulation of copper from the periphery that caused the elaboration, but rather the elaboration of social complexity that allowed access to materials and goods from far-flung localities. It has, in fact, been suggested by Hall (1991) and others that the masquettes were symbols that operated similarly to the historic Calumet pipes used in the Calumet ceremony among Plains Indians. The ceremony was an adoption rite that created fictive kinship relationships between unrelated groups. It can be seen as a way to provide a stable relationship between potentially competitive polities and as a means to

provide safe conduct for priests and/or traders who moved between and among polities. In this view, the masquettes were not commodities to be controlled by an elite, but badges of office that facilitated trade in other goods and/or services—quite likely connected with ideologically shared ritual performances.

Cahokian Ramey Incised pottery, strongly correlated with the presence of exotic shell and copper ornaments, is found at sites throughout the main river drainages of the Midwest, and might be seen as signifying the presence of the economic giant in the core to those in the periphery. Ramey Incised pottery contains decorative elements that historically were powerful symbols of the continuity of life, as well as warrior status (Hall 1991). The falcon or thunderbird motif is present on Cahokia pottery and in stylized form on several peripheral wares such as Oneota and Langford materials throughout the core, semi-periphery, and periphery. Elite ownership and display of Cahokian pottery (or imitations thereof), may be seen as a way for local elites to bolster their own power using support and symbols from the center. A wooden baton, carved into the likeness of a falcon, found in an elite burial at Aztalan may have functioned in this way.

Here again, however, there is a catch. Hall (1991) points out that the distribution of peripheral Oneota ceramics bearing the thunderbird and related motifs matches the distribution of Ramey Incised pottery. If Ramey Incised pottery is an indication that peripheral elites were signalling to their local populations that they were backed by core elites, it is equally possible that the Oneota pottery found at core sites suggests that core elites desired peripheral pottery for similar reasons. The isomorphic distribution of Oneota and Ramey Incised pottery with their ritually important decorative motifs suggests that these items were moving across the Mississippian world via a mechanism free of core elite control.

Moreover, Ramey Incised pottery is often recovered from general habitation middens, and not necessarily in elite graves or other places of social or ritual significance (Hall 1991). If elites controlled the distribution of these pots, we would expect them to be found clustered in elite house structures and/or graves. The non-clustered depositional context strongly suggests that ownership or trade of Ramey Incised pottery was not under the control of a ruling elite at all. These examples do not support the notion that core elites controlled trade with the peripheral populations. However, it is clear that direct and indirect contact between Cahokia and sites in the far-flung hinterlands was feasible.

We can now look at Stein's third proposition, that a hierarchical WST view requires us to assume that the trade economy transforms the local economy into a dependent supplier of goods to the core. Here we have the most problematic

aspect of Mississippian hierarchical core-periphery interaction. As the earlier discussion about meat trade and faunal remains indicated, there is little evidence that Mississippian sites in the Central Illinois, Wabash, or Ohio Rivers were organized to produce any specialized commodities such as bison or deer meat (Black 1967; Harn 1975, 1978, 1980). The situation is even worse for Caddoan, Oneota, Fort Ancient, or other Upper Mississippian populations (Brown 1982, 1990; Jeske 1990; Michalik 1982; Rossen 1992). In fact, the opposite appears to be the case. The subsistence economies of Upper Mississippian and Fort Ancient sites demonstrate a very generalized economy with little evidence for multigroup interactions other than raiding.

Where does that leave an investigation into Mississippian core-periphery interactions? It is clear that some exotics such as marine shell did move from the south, through Cahokia to the semi-periphery and periphery. In addition, small amounts of copper and smaller amounts of other exotic items or raw materials possibly moved from the periphery to the core. Moreover, it appears that the movement of these exotics was accompanied by, perhaps aided by, ceramic pots and long-nosed god masquettes symbolizing an ideology revolving around warriors, the continuity of life and the thunderbird. In sum, shell moved from core to periphery, copper from periphery to core (maybe), and symbol-laden ceramics moved in both directions.

If specific value-added items such as shell artifacts were sent from the core to the periphery, but few economic goods or appreciable amounts of preciosities were not sent from periphery to core, then what else might possibly have been returned? Perhaps loyalty and subservience of the peripheral populations. Perhaps local elites were coerced into controlling their populations for the aggrandizement of American Bottom elites. The payoff for the local elites was access to important symbols and political alliances that enhanced their own status within their local group. Unfortunately, such loyalty is archaeologically invisible, as Peregrine's (1994) research has demonstrated.

By A.D. 1300, Cahokia itself went into decline while the peripheral Oneota populations expanded. Although the pattern of core decline and peripheral ascendence is expected in WST, it is difficult to argue that these later Oneota populations ever approximated a true core in terms of social and political complexity that overshadowed surrounding populations. The Oneota world of the fifteenth through seventeenth centuries did not contain sites with large scale architecture nor did it demonstrate the movement of exotic goods that we use to infer the existence of a ruling elite for Middle Mississippians.

Conclusion

What then can we conclude about taking a world-systems approach to Mississippian society? First and foremost, Mississippian society does not seem a compelling case for a hierarchical model of core-periphery interaction. The problems with such a model revolve around four primary areas:

1. The difficulty of boundedness of the core/periphery interactions.

2. The lack of evidence for a highly integrated core for more than a short period within the entire time span of Cahokia's rise and fall.

3. The data necessary to demonstrate elite control of economic resources are not present in the archaeological record.

4. There are insufficient data to suggest that elites controlled access to exotic artifacts and materials in a power-prestige hierarchy that functioned entirely to allow elites to reproduce themselves socially.

However, the notion of differential core-periphery interaction is a framework in which the concepts of gateway communities and prestige-goods exchange can be examined in relationship to each other to find a comprehensive approach to Mississippian society. The task now is to operationalize our expectations for what such a system would look like archaeologically, and to devise testable hypotheses that would differentiate a world-systems approach from other concepts such as interaction spheres (Struever and Houart 1972) or other models of reciprocal and redistributive trade networks. While this paper has not explored these hypotheses in any detail, future work to refine our expectations for the archaeological record and to test these expectations will be forthcoming.

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12

The Inca Empire: Detailing the Complexities of Core/Periphery Interactions

Lawrence A. Kuznar

Introduction

The Inca Empire (ca. A.D. 1400 -1532) was the largest indigenous empire and state in the New World, stretching 3,000 km from modern Ecuador to central Andean Chile and Argentina (Figure 12.1). This empire had an army, a large bureaucracy of accountants and other functionaries, a system of taxation, a rigid class system, and massive public works including an extensive network of roads and storehouses. The Inca[1] were predatory and expansionist, conquering many different ethnic groups and appropriating goods from them. Below I explore the usefulness of world-systems, or core/periphery, approaches for explaining the relations between the Inca and their conquered peoples, and detail some of the complexity in these core/periphery interactions.

World-Systems Theory

There has been much work in anthropology and elsewhere designed to clarify, test, and modify Wallerstein's original formulation of world-systems theory (Chase-Dunn 1989; Chase-Dunn and Hall 1991; Hall and Chase-Dunn 1993, 1994; Schneider 1991 [1977]; Kardulias 1990; Blanton and Feinman 1984; Dincauze and Hasenstab 1989; Kelly 1985; Wallerstein 1995; Wilkinson 1987). Chase-Dunn and Hall (1991) denote the intellectual offspring of Wallerstein's theory as core/periphery studies. This reflects a shift away from rigid economic classifications to a focus on the dynamic processes of economic domination and resistance that take place between core polities and their peripheries. Throughout this chapter I use the terms world-system and core/periphery interchangeably.

A world-system is a bounded social system with "a single division of labor and multiple cultures. . . . world-systems are intersocietal networks in which the interaction (trade, warfare, intermarriage, etc.) is an important condition of the reproduction of the internal structures of the composite units and importantly

affects changes which occur in these local structures" (Chase-Dunn and Hall 1991:6-7). It is therefore a primarily economic system, and one that has member groups, rules of legitimization, and coherence (Wallerstein 1974:347).

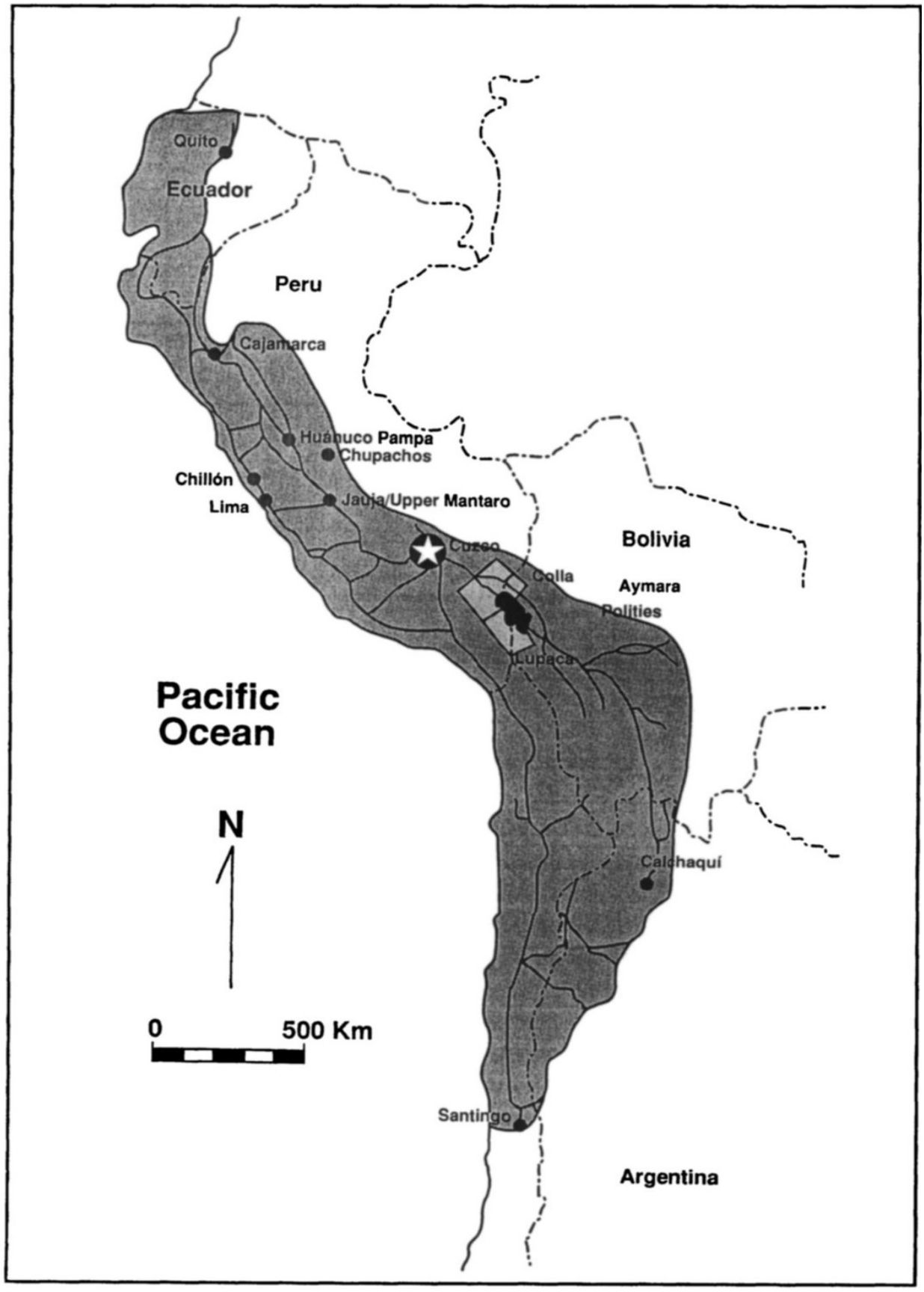
Quito
Ecuador
Peru
Cajamarca
Huánuco Pampa
Chupachos
Chillón
Lima
Jauja/Upper Mantaro
Cuzco
Colla
Aymara
Polities
Bolivia
Lupaca
Pacific
Ocean
N
0
500 Km
Calchaquí
Santiago
Argentina

Figure 12.1. Extent of the Inca realm ca. A.D. 1525 (after Rowe 1946:205).

These systems are self-contained in an economic sense, and have a division of labor based on ethnic and class distinctions. Core state elites control most wealth and finances and possess advanced military technologies that enable them to dominate their system. Peripheral areas have weak or nonexistent states (e.g., colonies) and are dominated by the core (Wallerstein 1974:349). The essence of a world-system is a net flow of goods, services and wealth from the periphery to the core, and this flow may take the form of raw materials going into the core, and being redistributed as value-added goods back to the periphery (Wallerstein 1974:16). There is also a class of semi-peripheral states whose members are not central enough in the system to have a controlling influence, but nonetheless are able to act as brokers in this uneven flow of material wealth (Wallerstein 1974:349; So 1990:180). Chase-Dunn and Hall (1991:21) augment Wallerstein's definition in light of more recent world-system investigations. They point out that semi-peripheries may mix both core and peripheral forms of social organization, be geographically located between cores and peripheries, may mediate relations between the core and the periphery, and may contain institutional features that are intermediate between those found in the core and periphery.

The collection of tribute is a central feature of an imperial world-system and theorists debate the nature of this uneven exchange. Wallerstein (1974) concentrates on what he assumes are basic essential goods such as food, as opposed to sumptuous preciosities (often referred to as valuables in anthropology, see Dalton 1982) that are primarily traded among elites (Wallerstein 1974:41). Schneider (1991 [1977]) provides a critique of this dichotomy, pointing out that trade in preciosities such as precious metals and spices, can be central to maintaining the hierarchies of core polities, and therefore central to reproducing the economic structures that maintain an empire. Kardulias (1990) provides an example and analysis of such a system, the development of the fur trade for beaver felt hats on the New World colonial periphery. Schneider (1991 [1977]:54) also points out the power that gift-giving can exert over dominated rulers, as the reception of preciosities then places these subsidiary rulers in debt to rulers in core polities.

Throughout these analyses and debates, anthropologists have retained the designations of core, periphery and semi-periphery, and there is a general expectation that core polities exert a dominance over peripheries; this dominance ultimately results in the extraction of goods from the periphery. While the old

designations core/periphery remain important, anthropologists do not typically assume that peripheral populations are hapless victims of core progression, and there is considerable attention to the dynamics of periphery resistance and opportunism (Stein 1993; Gragson 1994; Jeske, this volume; Shutes, this volume; Wells, this volume). Anthropologists also are testing the limitations of world-systems approaches (Jeske 1996; Stein 1993). Finally, there is increasing attention to the myriad ways core/periphery relations are manifest, including considerations of the different types of goods involved, as well as logistical problems that may limit core influences.

Whether or not the Inca system can be understood from a core/periphery perspective depends upon how well basic core/periphery concepts fit our knowledge of the Inca Empire. An imperial world-system should exhibit the following features:

1. The empire should encompass a large and bounded area, and be centralized
2. The empire should be economically self-contained
3. The empire should contain core, periphery and semi-periphery polities
4. There should be a net economic flow of raw materials and wealth from periphery to core
5. Ethnicity should be used in the division of labor

Should the Inca Empire fit these expectations, then further study may aid in understanding the dynamics of core/periphery interaction. The present study has as a primary goal the examination of the Andean case in light of world-system concepts to test the appropriateness of these ideas for one precapitalist state.

The Inca Empire as World-System

The Inca Empire at the time of Spanish contact (A.D. 1532) conforms to most expectations for a core/periphery world-system. Darrell LaLone (1991, 1994) provided the first explicit world-systems analysis of the Inca Empire. He argued that the Inca imposed a hegemony upon conquered peripheral polities and transformed peripheral societies from kin-based to tributary-based economies, and he explained diversity in core/periphery relations from a historical perspective. While LaLone provided an intriguing analysis of the Inca Empire from a world-systems perspective, further analysis can elaborate on the diversity of core/periphery relations in the empire, and explain how people in peripheral

and semi-peripheral regions adapted to, were oppressed by, and even profited from Inca domination.

The Inca Empire was a large and economically self-contained polity. Despite the difficulty that many researchers have found in drawing boundaries around world-systems (see Chase-Dunn and Hall 1991:8-15; Hall and Chase-Dunn 1993:126), the Inca case provides fairly clear-cut boundaries. The Empire eventually stretched from the domains of powerful chiefdoms in modern-day Ecuador to the north, was constrained by the Pacific to the west and the Amazonian lowlands to the east, and reached the Maule river of central Chile in the south (Figure 12.1). Their interactions with Amazonian and south Andean groups were probably not sustained enough to qualify as world-system interaction following Wilkinson (1987). The Inca were economically self-contained because they did not have to import either essential foodstuffs or minerals. The Inca incorporated any polity that possessed raw materials the Inca desired. For example, Netherly (1988) describes how the Inca took control of the middle Chillón Valley near Lima, Peru, and set up Inca colonies to control the production of coca in this region (Figure 12.1). The Empire also had a very distinct geographical core that contrasted with more peripheral regions and semi-peripheral states.

The Core: Cuzco

Cuzco was clearly the core of the Inca Empire, ideologically, economically, and politically. Even in the region surrounding Cuzco, differences were drawn between true, founding lineages of the Inca and more peripheral people (Zuidema 1990; Bauer 1992). Brian Bauer (1992:125) argues that this core-periphery/Inca-conquered duality is embedded in Inca ideology. Cuzco was the center of politics and religion as the residence of the Inca god-king and his holy lineage, or *panaca*; the Inca also considered Cuzco the cosmological center of the universe (Urton 1981:202). The Inca brought the children of privileged (and controlled) foreign leaders to Cuzco for schooling, and these children sometimes married into the Inca royal line as a means of solidifying alliances (Silverblatt 1987:62, 87-88; Patterson 1991:78-79). The Inca extended this benevolent hostage-taking even to the gods of conquered peoples as the Inca removed foreign idols from their home territories and placed them in the care of Cuzco residents or in the Inca temple of the sun (Silverblatt 1987:94; Cobo 1990 [1653]:48, 49). These idols were simultaneously honored by being brought into the sphere of the one true god of the Inca while being subordinated to the Inca god. Finally, it was in Cuzco that the descendants of dead Inca rulers propitiated their dead kings in a state-sponsored cult that was essential to Inca political and religious life (Conrad and

Demarest 1984; Conrad 1992). Cuzco represented a core to which economic, political and even supernatural power flowed from the Inca periphery.

The Periphery

Peripheral polities would be regions where Inca rulers were able to appropriate raw materials, labor and wealth, and where the local people or their elites would have little power to alter the form of this extraction. The province of Chupachos is one example of such a peripheral polity (Grosboll 1993; Julien 1993). This province is largely a lowland area in central Peru at the headwaters of the Huallanga river system (Figure 12.1). A Spanish survey of the province in 1549 noted that the Inca had substantially resettled the Chupacho province for the purposes of political control and economic extraction. There were 4,108 households recorded for the Chupachos province (Julien 1993:210), of which the Inca removed 1,110 (27 percent) to Cuzco. Another 1,498 households (36.5 percent) resided outside of the province either part or full-time. The Inca assigned 500 of these to military service. Of the remaining 1,500 households, the Inca assigned 500 to agricultural service, and relocated 1,000 to specialized production communities (Julien 1993:210). In sum, the Inca forcibly resettled 89 percent of the households of Chupachos for political, military, and economic purposes. The specialized communities set up by the Inca within Chupachos concentrated on the production of raw materials indigenous to that lowland region. These production communities specialized in pottery, woodworking, herding (probably llamas), gold panning, featherworking, bird and honey collecting, and coca and maize production (Julien 1993:206). Many other peripheries existed and current research not only details their peripheral status, but also underscores the diversity in Inca core/periphery relations (Malpass 1993; Morris and Thompson 1985; Earle et al. 1987; D'Altroy 1994; Patterson 1991:80).

The Semi-Periphery

LaLone (1994:34) notes that kingdoms such as the Chimu and Lupaca would be good candidates for semi-peripheral polities. The Aymara kingdoms (such as the Lupaca) to the south of Cuzco, by virtue of their large size, strong political hierarchy, and nearness to the Cuzco core arguably had semi-peripheral status. The Inca used preexisting political structures in the administration of these regions and since many of the former elites were responsible for this administration (Rowe 1946:272), a limited degree of autonomy and control could be exercised by these administrators, matching both Wallerstein's and Chase-Dunn and Hall's definitions.

Julien (1993) provides evidence that the Aymara kingdoms retained much of their indigenous political structure, although the Inca managed to extract resources from them. For instance, the Lupaca (Figure 12.1) were organized into two *huno,* with each *huno caraca* lord responsible for 10,000 households (Julien 1993:188). Each *huno caraca* kept a census for the whole province that could be checked against the census of the other *huno caraca.* "In the nearby Colla provinces, administrators of productive enclaves in one province resided in another" (Julien 1993:188). She suggests that the Inca instituted this dual organization as a means of providing checks and balances among the conquered rulers.

The Inca also appear to have sponsored specialized craft production in the Aymara kingdoms (Julien 1993:189; Murra 1965). The Inca promoted a state ideology that laid claim to all lands and beasts as ultimate property of the Inca state. This fiction justified Inca establishment of state herds in the productive pastures of the Aymara kingdoms of Lupaca and Qolla. The Inca established a

> Pax Incaica: the local boundaries between the pastures of ethnic groups were to be set up and enforced (Polo [1561], 1940:194; Falcón [1580?], 1918:149; Garcilaso de la Vega [1604], bk. 2. ch. 13; 1960:61); many of the llamas were confiscated to form the nucleus of Inca state herds (Polo [1571], 1916b:62); others were granted as spoils to the Cuzco soldiers, individually (Murra 1965:204).

These examples of extraction however, were not accomplished without the cooperation of local elites and a certain amount of reciprocity between Inca and Aymara lords that gave the Aymara kingdoms a degree of control over production (Julien 1988; 1993).

Another form of semi-periphery comes from the vicinity of the Inca capital, Cuzco. The Inca based their administrative organization in the Cuzco valley on a distinction between an Inca-by-Blood core and a non-Inca, or Inca-by-Privilege periphery (Zuidema 1990:12). This semi-periphery was subservient to the Inca core; "the inside was considered superior and the outside inferior" (Zuidema 1990:54) in Inca society. Investigations of the Province of Paruro, near Cuzco, indicates that these residents, known in Spanish as *Incas de Privilegio,* were "subservient to Cuzco, yet allied with it, the *Inca de Privilegio* represented a large, tribute-paying social stratum that supported the ruling elite in Cuzco through direct produce, and by occupying low-level bureaucratic positions in state institutions" (Bauer 1992:141). These administrators, while not true core

members, nonetheless benefitted from their administrative connections to the core, and so were not peripheral. Once again, this is evidence of an intermediate form of social organization between the core and periphery.

An uneven flow of goods from periphery to core is a fundamental element of world- system formulations (Wallerstein 1974; Schneider 1991 [1977]; Chase-Dunn and Hall 1991). The chronicles all are clear about the flow of goods from conquered regions to the core Inca state (Cieza de León 1959 [1553]:Ch. 49; Poma 1990 [1615]:35-36; Vega 1966 [1609]:Bk. 6, Ch. IX; Cobo 1979 [1653]:208 ff.), and recent archaeological research corroborates this asymmetrical exchange. Much of this produce, extracted by appropriating the labor of conquered people to produce goods, wound up in great Inca storehouses where the goods could then be redistributed according to the state's needs (Morris and Thompson 1985). For instance, Hastorf (1990) provides paleoethnobotanical evidence that households in the Upper Mantaro Valley of Huánuco, Peru, produced more maize than they consumed after Inca domination, the surplus maize presumably going to state storehouses. Archaeological research in the same region shows how the Inca substituted inferior metals (bronze) in peripheral regions and extracted more valuable metals such as silver (Earle et al. 1987:103). D'Altroy's (1994) archaeological research from Calchaquí, Argentina demonstrates how the Inca set up mines for precious metals in that region. This Inca exploitation of precious metals conforms to Schneider's (1991 [1977]) argument that core polities dominate through their ability to control preciosities.

The Inca dominated many diverse ethnic groups, and this ethnicity affected economic flow in two ways. First, there was the all-important distinction between ethnic Inca-by-Blood and non-Inca (Zuidema 1990; Bauer 1992), with the attendant privileges of political and cultural dominance conferred upon the Inca-by-Blood. This distinction formed the basis for the Cuzco Core versus non-Inca periphery distinctions in economic flow. In their analysis of Inca manipulation of ethnicity in Huánuco, Morris and Thompson (1985:165) state, "The Inca policy in Huánuco appears to have emphasized the maintenance and manipulation of diversity rather than an attempt to integrate through the creation of cultural uniformity." Ethnicity was also an important factor in the Inca use of colonies (Rowe 1946; 1982; Murra 1980), described below. The uneven flows of wealth, the political domination of weaker polities, and the use of ethnicity to define privilege were part of a system whose parts functioned to perpetuate these exploitative relationships.

Chase-Dunn and Hall (1991:7) stress that in world-systems, the forms of interaction of the system are important in reproducing the social structures of the component polities. Conrad (1981, 1992) and Conrad and Demarest (1984)

provide an intriguing and controversial reconstruction of how Inca expansion became an essential ingredient in the maintenance of Inca social structure. Chroniclers (Poma 1990 [1615]; Cobo 1990 [1653]:39-43; Cieza de León 1959 [1553]:189) detailed the Inca worship of dead, mummified kings, and the cults that grew out of this worship. Ancestor worship cults were related to a system of split inheritance in which the heir to the Inca throne inherited the status of king, but the wealth acquired by his predecessor went to the other descendants. Those descendants who inherited the previous Inca's wealth used this wealth to sustain themselves and his cult. The new Inca, by necessity, had to find sources of revenue with which to build his own wealth. According to Conrad (1981, 1992), this ideological system of split inheritance was the motivating factor in Inca expansion. Other Andean researchers (Paulsen 1976; Isbell 1978; Carniero 1992) suggest that material factors such as mitigating environmental stress, or plundering for personal aggrandizement, motivated the expansion of the Inca empire. Whether or not lofty ideology or crass materialism were the motivators for Inca expansion, all researchers agree that the Inca core elite maintained their position through expansion and the extraction of resources throughout the realm. Furthermore, the descriptions of peripheral and semi-peripheral politics offered above demonstrate how Inca domination structured the economies of production throughout the empire. In some cases, this structure was essential to the maintenance of local elites.

The Inca state generally corresponds to a world-empire as defined by world-systems theorists. As Wallerstein notes of all empires/economies, their basic purpose is to appropriate the wealth and resources of the periphery and to concentrate these in the core, and they accomplish this through the control of peripheral populations. However, the empire was not monolithic in its control, and used a combination of coercion and enticement to achieve this control. The degree to which the Inca could coerce resources was related to the proximity of a polity to the Inca core, and to the size of the population and its pre-Inca political integration. Those polities that were small and nearby were easily coerced, those polities that already possessed strong hereditary leaders with a large population and/or that were distant from Cuzco required a softer touch.

Maintaining Control By Coercion

The Inca Empire was a large bureaucratic organization with a standing army. The maintenance of a costly war-machine indicates that coercion was part of imperial policy, and ethnohistorical data overwhelmingly attest to this. Chroniclers (Poma 1990 [1615]; Cobo 1979 [1653]; Cieza de León 1959 [1553]) largely focus on the historical ascendancy of the Inca over their Andean neighbors

in battle after battle, and archaeological and iconographic evidence is replete with star-headed maces, defensive fortifications, violent injuries, and decapitated heads (Rowe 1946; Poma 1990 [1615]). Not only was the Inca state an empire of conquest, but after a victory, the Inca also employed many means of coercion in order to maintain control. I have already detailed the conquest of new lands for the control of coca production, the forced schooling of conquered nobles' children, forced resettlement, extraction of precious metals, the eminent domain of the Inca state, and the general Pax Incaica. Further evidence exists in the form of uneven flows of goods, an Orwellian means of population administration, taxation, colonization, census taking, and the outright use of force.

The simple flow of goods from periphery to core does not necessarily imply imperial economic hegemony as Stein (1993) notes for Mesopotamia, Sinopoli (1994) notes for Medieval India, and Gragson (1994) notes for contemporary cattlemen and foragers in Venezuela. Evidence of the actual Inca control and appropriation of goods is required. This evidence comes from documentation and archaeological remains of the Inca administration of Chupachos in the central Andes (Figure 12.1). This province lies in an intermediate location in the Empire, only about 500 km from the Cuzco core, and therefore would have been more easily coerced than more peripheral regions. Julien (1993:209) notes the presence of several Inca *tambos* (storehouses) and fortresses. More importantly, the Inca established ethnic colonies of people from other parts of the Empire to garrison the province and to extract resources (Julien 1993:208-209), indicating that the residents of Chupachos had little control over their territory. The radical resettlement of Chupachos within and without their province further suggests a lack of control over their own destiny. In fact, Julien (1993:210) concludes that Chupachos was an estate that eventually served the state cult of the dead honoring the Inca Huayna Capac.

The Inca used a decimal system (Cobo 1979 [1693]:198; Vega 1966 [1609]:94-95; Rowe 1946:263; Julien 1982; Patterson 1991:76) to monitor the activities of the Empire's subjects, to organize peasant labor, and to levy taxes on peasant households (Stanish 1992:27). This system consisted of a hierarchy of foremen and state officials. It is best to consider the decimal system as an idealized scheme, since there is debate among Andeanists over whether or not the exact figures presented reflected Inca administrative realities (Murra 1980:117 n. 48; Patterson 1991:76). I use the spellings provided in Julien (1982:123) for these varied decimal officials. Ideally, the system began with a *chunka,* or foreman, who was responsible for 10 taxpayers. Above this official was another local foreman, a *piska chunka,* who had 5 *chunka,* or 50 taxpayers below him. Above this level were hereditary positions, subject to state approval. The *pachaka* was

responsible for two *piska chunka,* or 100 taxpayers. The *piska pachaka* had 5 *pachaka* below him, or 100 taxpayers. This system went up the line including a *waranqa* (chief of 1,000), a *piska waranqa* (chief of 5,000), and then a *hunu* (chief of 10,000). Above the *hunu* was a provincial governor, or *t'oqrikoq,* who in turn reported to an *apo,* or prefect of one of the four geographical divisions of the Empire (Rowe 1946:263). Above the *apo* was the Inca himself. Theoretically, officials could report dissidence at the lowest level to the Inca himself in just a few administrative steps (Vega 1966 [1609]:94).

Taxation existed in a variety of forms, including labor tax, state appropriation of fields and herds, and the importation of women from peripheral communities, and the state sent special accountants (*quipu-camayocs*, *tokoyrikoqs*) to communities in December to levy these taxes (Patterson 1991:76). The Inca levied a labor tax, known as *mit'a,* upon all households, and officials employed the decimal system to do this (Murra 1980:31, 1982; Julien 1982:135-141; Rowe 1946:268; Stanish 1992:35; Patterson 1991:77). Each male family head owed a yearly period of service to the state (Murra 1980:91; Rowe 1946:267; Cobo 1979 [1653]:231; Vega 1966 [1609]:262).

Another form of taxation involved the distribution of land. The Inca divided land into three sections, allotting a portion for the local community, a portion for the state, and a portion for the state-sponsored religion (Murra 1980:31; Cobo 1979 [1653]:211; Vega 1966 [1609]:242). These are not necessarily equal divisions, but nonetheless represent substantial inroads upon a local community's resources (Metraux 1970:94-95). Every local community also owed a labor tax to be spent working these state fields (Rowe 1946:265). Murra (1965) notes that a similar situation prevailed for state versus local llama herds.

The Inca levied another de facto tax through the institution of nunneries. State officials chose girls from communities throughout the empire to populate its nunneries; these women were called *aclla* (Rowe 1946:269; Silverblatt 1981). La Lone (1994:26-27) and Silverblatt (1987:80) note the profound implication of the Inca's ability to dispose of a polity's women as they saw fit, and they point out that the conscription of the *aclla* drained communities of much labor, and directed that labor toward the state. Rowe (1946:269) states, "The *Inca* government controlled its women subjects as arbitrarily as its men" through this institution. These women, along with being instructed in the official state religion, also brewed chicha beer and wove textiles, the two primary manufactured goods of the empire (Poma 1990 [1615]:51; Vega 1966 [1609]:195-203). Archaeological evidence of such production is evident at large centers like Huánuco Pampa (Morris and Thompson 1985:90).

These varied levies required impressive accounting in an empire that numbered in the millions, and this was accomplished by *quipu-camayocs* (Rowe 1946:272; Murra 1980:109-110; Vega 1966 [1609]:124, 267, 329-330; Cobo 1979 [1653]:253; Cieza de León 1959 [1553]:174). The *quipu* were complexes of knotted strings that *quipu-camayocs* used as mnemonic devices to remember accounts and historic events.

Inca institutions of land tenure, labor allocation, population organization, and accounting are impressive mechanisms for resource extraction, that required coercion to institute and maintain. The Inca coerced through the punishment of individuals, punishment of communities, military attack, and forced resettlement. Chroniclers noted that Inca punishment was swift and severe. Individuals found guilty of an offense received reprimand, exile to plantations, loss of office, torture, or death (Rowe 1946:271, Cobo 1979 [1653]:203-207; Vega 1966 [1609]:96; Cieza de León 1959 [1553]:171). More importantly, dissident communities could receive harsh retribution from the state, being attacked, destroyed and/or uprooted (Vega 1966 [1609]; Metraux 1970:114). Uprooting could be especially effective. For instance, those communities that did not observe the ritual calendar mandated by the Inca,

> *Serán castigados y serán muertos y condenados a muerte y se acabarán todo su generación y consumerá sus pueblos; y se sembrará sal en ellos* (Poma 1990 [1615]:33).
>
> They will be punished and they will be dead and condemned to death and all of their generation will be wiped out and their towns will be destroyed; and salt will be sown in their lands.

Uprooting is related to colonization. Colonization is an ancient feature of Andean polities that predates the Inca (Murra 1968; 1972, 1980; Salomon and Urioste 1991; Spaulding 1984:37), and archaeologists have located evidence of these ethnic archipelagos (Stanish 1989; 1992). Core polities exploited peripheries by direct placement of ethnic groups, as well as through indirect forms of exploitation (Stanish 1992:1, 112). The Inca manipulated and expanded this system for state economic and political needs. Rowe (1982) details three types of male status, *yanaconas, camayos,* and *mitimas* (*mitmaq, mitimaes*), and Murra (1980:163) provides a similar classification. *Mitmaq* refer to colonies linked to specific provinces, the colonists retaining their kin and economic obligations to their own ethnic group (Rowe 1982:105; Netherly 1988:267). *Yanaconas* were personal retainers to Andean rulers, and the Inca maintained such

retainers, sometimes recruiting them from war captives (Rowe 1982:100). Finally, the *camayos* were communities of craftsmen who were uprooted from their own groups, the effect being "to weaken the local loyalties of some *camayos* and create bonds to the Inca state" (Rowe 1982:105). In the Empire, *mitmaq* were colonies of ethnic Inca (or other Inca-dominated groups) that the state set up in varied regions to control production and limit political dissent (Rowe 1946:269; Cieza de León 1959 [1553]:166; Julien 1993). Even powerful, semi-peripheral states had some of their productive lands and resources appropriated by the Inca through the use of *mitmaq*.

> As soon as one of these large provinces [of barbarians] were conquered, ten or twelve thousand of the men and their wives, or six thousand, or the number decided upon, were ordered to leave and move themselves from it. These were transferred to another town or province of the same climate and nature as that which they left . . . these were called *mitimaes* (Cieza de Le6n 1959 [1553]:57).

> Indians were also transferred for another reason. Whenever some warlike province had been conquered which was distant from Cuzco and peopled with fierce and restless inhabitants and might therefore prove disloyal or unwilling to serve the Inca peacefully, part of the population was moved away from the area—and often the whole of it—and sent to some more docile region, where the newcomers would find themselves surrounded by loyal and peaceable vassals and thus learn to be loyal themselves (Vega 1966 [1609]:402-403).

Cieza de León (1959 [1553]:57-62) further notes that *mitmaq* were used to indoctrinate the surrounding populace, to garrison newly conquered territories, and to populate empty lands, and Patterson (1991:77) concludes that *mitmaq* could be uprooted rebels, loyal settlers sent to monitor recalcitrant populations, outright garrisons, or settlers populating unused lands.

Maintaining Control by Enticement

The Inca maintained control with carrots as well as with sticks. These enticements included supporting local elites, constructing public works, and provisioning conquered peoples from state storehouses. Local leaders who consented to Inca overlordship could benefit from the backing of the powerful

Inca administration (Patterson 1991:80), as Murra (1965) and Julien (1988; 1993) have documented for the large Aymara kingdoms of the Titicaca basin. The Aymara polities were populous states with strong hereditary rulers and so the Inca could not easily dominate them. The Inca supplied local lords with gifts and grants of llamas from state herds; the local lords used these grants to provision Inca facilities along its highway to feed Inca armies (Murra 1965). Julien (1988:142) notes how local Lupaca rulers had their social position maintained by the Inca as heads of decimal systems for *mit'a* labor recruitment, enabling the Inca to limit the power of these local puppets. In short, the Aymara lords retained their noble status by association with the Inca state, provided they acquiesced to Inca domination and provided goods from their territory along with safe passage for Inca armies and goods that passed to and from more peripheral parts of the Empire. The adoption of more intermediate forms of social organization between the strong centralized Inca core state, and smaller, more kin-based Aymara kingdoms, along with their geographic proximity to Cuzco, matches Chase-Dunn and Hall's (1991) expectations for a semi-peripheral polity.

Chase-Dunn and Hall (1991:8) point out that the "existence of exploitation, domination or unequal exchange should not be a matter of assumption, but rather investigation." For instance, the Inca provided benefits to their conquered vassals by expanding and creating many public works including canals and terraces (essential for much of Andean agriculture), roads, and storehouses (Rowe 1946:229-233; Morris 1988; Netherly 1988; Lynch 1993; Poma 1990 [1615]:103-105; Cieza de León 1959 [1553]:158; Vega 1966 [1609]:241, 255; Cobo 1979 [1653]:215-230; Cobo 1990 [1653]:231). These infrastructural improvements had an influence on peripheral peoples' health. Paleodemographic research in the Jauja region of central Peru clearly shows an improvement in nutrition that accompanied Inca domination, although the basic economic relationship was one of unequal extraction (Earle et al. 1987:101). As Rowe (1946:273-274) notes, "The government insured the individual against every sort of want, and, in return, demanded heavy tribute in labor, a very small part of which directly benefitted the people who paid it." The Inca manifest this control over their subjects through their extensive systems of food and goods stores in high-altitude *colcas* and *tambos* (Rowe 1946:231; Morris and Thompson 1985:108). The Inca could use these stores to aid subjects in times of need, or to punish subjects by withholding them. In either way, the Inca harnessed the labor of conquered peoples to keep these stores full.

> *Y así el Inca, en este mes de marzo, tenía mandado puesto un juez en cada pueblo de las sementeras, para que no los gastasen los indios ni los*

acabasen presto las comidas; y que guardasen para todo el año (Poma 1990 [1615]:112).

> And so the Inca, in March, had placed a judge in each town of the agricultural lands, in order that no one waste nor eat up the food too fast; and to guard the food all year.

> Throughout the whole kingdom there were three sorts of storehouses to hold the harvest and tribute. Every village, whether large or small, had two storehouses: one was used to hold the supplies kept for the use of the people in lean years, and the other was used for the crops of the Sun and Inca. There were other storehouses at intervals of three leagues on the royal highway, and these came to serve the Spaniards as inns or taverns (Vega 1966 [1609]:255).

These examples indicate that Inca administrators used enticements as well as punishments in maintaining control of its conquered subjects. Inca core/conquered periphery relations were varied; benefits as well as punishments could flow from core to periphery. Inca/subject relations were hardly monolithic, and conquered people were able to exert their own powers to differing degrees in dealing with the state.

Conclusion

Did the Inca Empire conform to a world-system? Considering ethnohistorical accounts and emerging archaeological analyses, the answer is a qualified yes. The empire was a bounded, self-contained system with recognizable core, semi-periphery and periphery characterized by an uneven flow of goods and services from periphery to core that in turn structured economic and social organization of all polities involved. Recognition of the Inca's use of indigenous social organization actually strengthens the case for a world-system since we can see the systematic formation of a semi-periphery. LaLone's appreciation for historical process underscores as well that the Inca Empire was not a *fait accompli,* but rather a world-empire in the making. In fact, the Empire was racked by civil war, and disintegrated by 1532 (Patterson 1991). The fact that the Inca Empire may never have coalesced into a complete world-system empire helps us to understand LaLone's qualification. He (1994) suggests that the diversity we see in Inca core/conquered periphery relations is due to the fact that Inca domination was in process and incomplete when the Spanish arrived in 1532 and disrupted this

indigenous development. LaLone (1994:21) states, "The incompleteness of the transformation reflects also the still inchoate development of core/periphery hierarchy. Cuzco's status as core was indisputable . . . while the status of other regions as relative periphery was still in contention."

I offer the following hypothetical explanations for the variability in Inca core/periphery relations. One is the use of indigenous political organization in the Empire's administration of conquered polities, leading to different modes of extraction as well as to the creation of a semi-periphery among conquered, yet powerful, kingdoms such as the Lupaca, Colla, and Chimu (La Lone 1994; Patterson 1991:80). Another reason is that Inca imperialists, despite their army, roads, and administrative organization, were still constrained by distance (see Stein 1993 for a Mesopotamian example). The only beasts of burden were llamas, which can carry only about 25 kg each, and people, who need to transport their own food (see Hassig 1992 on the Aztec). As the Inca ventured farther from their Cuzco core, they were harder pressed to force their hegemony upon other polities (Salomon 1978). Finally, the Inca Empire was still in a process of consolidation when it collapsed.

While studies of the Inca can aid our investigations of imperial world-systems, Andean researchers can use world-systems theory to reinforce our understanding the empire's most salient characteristics. One beneficial influence of a world-systems approach for Inca research would be a reorientation of both archaeological and ethnohistorical research to the empire's periphery, since knowledge of the core is de facto incomplete without knowledge of the periphery. This reorientation is already underway (Malpass 1993; Earle et al 1987; Morris and Thompson 1985) and it offers us both a richer understanding of the operation of the Inca Empire as well as information on previously little known or unknown regions and peoples. The comparative framework of world-systems theory will also benefit Andean research as it relates the Inca to similar empires around the world and through time. Such comparison may enhance efforts at understanding the growth of the Empire and its eventual downfall. The approach also focuses Andean researchers on the most salient characteristic of the Inca Empire as well as other Andean states—the control over the production of the varied goods necessary for the sustenance of populations and the reproduction of the elite. As an example, scholars (Murra 1972; Bastien 1978; Brush 1977; B. Isbell 1978; Mujica, Rivera and Lynch 1983; Stanish 1989) have underscored the importance of verticality in Andean economies. The descriptions above provide evidence that the Inca maintained such vertical control either through tribute payments or through direct colonization. World-systems theory and its comparative framework may also shed light on the cause of empires, and thereby help to resolve the

current debate over the ideological versus material foundations of Andean empires (see Conrad 1981, 1992 vs. Carniero 1992).

World-systems theory, or core/periphery studies, is therefore a useful approach for understanding the phenomenon of the Inca Empire, while the data from Inca studies can be used to corroborate and, when contradictory, challenge the theoretical formulations of general world-systems theory. Chase-Dunn and Hall (1991) call for empirical cross-cultural comparisons to enable a broader applicability of world-systems theory concepts, and this description of the Inca Empire along with La Lone's (1994) help to provide an empirical basis for comparison.

Notes

1 The term Inca refers to several different things. It can refer to the Inca king himself, the core of Inca noble lineages, the ethnic Inca of the Cuzco region, or integrated members of the Inca society (see Patterson 1991:69; Metraux 1970:18 for a discussion). I use it in all of these ways, indicating which definition prevails in each particular context.

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13

The Evolutionary Pulse of the World System: Hinterland Incursions and Migrations, 4000 B.C. to A.D. 1500

George Modelski and William R. Thompson

Introduction

As part of an ongoing exploration of long-term pulsations in the world system, we examine arguments that link large-scale, "barbarian," or hinterland migrations into urbanized zones with major consequences for the survival and transformation of cultures, polities, and economies. The classical cases are the "Sea Peoples" attacks on Egypt in the twelfth century B.C. and the Germanic/Hun attacks on Rome in the fifth century. These episodes have sometimes been credited with being much more than whirlwind campaigns of looting, pillaging, and mass destruction.

Students of social evolution would regard these activities as long-term processes that are essential mechanisms of the working of the world system. Periodic shake-ups punctuate the evolution of that system, and not the least so at the most inclusive, intercontinental level, such that power and wealth are dispersed, and innovations may be more widely diffused. New forms of material working, weapons, forms of social organization, and belief systems can be (though may not be) introduced and spread on a broad scale.[1]

The basic thesis has its attractions but its empirical foundation is less than strong. We lack a basic series of data on migrations to sedentary, urbanized zones that would permit us to evaluate the apparent synchronization between major population movements, or at least destructive incursions, and significant political-economic transformations. Thus, in addition to discussing some of the arguments and previous empirical work related to the hypothesized linkages between migratory attacks and rise-and-fall sequences, we will also develop a new series of information on hinterland migrations/incursions that encompasses the period between 4000 B.C. and A.D. 1500. A very specific task of this paper will be to

employ this new data to assess the relative accuracy of E. N. Chernykh's (1992) periodization of great migrations. Two reasons for this focus are (1) Chernykh's unusual temporal comprehensiveness (3500 B.C. to A.D. 1300) and (2) strong elements of overlap with our own long-term model of core concentration-deconcentration (Modelski and Thompson 1996a, 1996b). Our primary questions, therefore, are to what degree Chernykh's seven periods of "great migration" can be substantiated independently and to what extent these periods of turbulence can be seen as serving as transitional agents for movements to and away from hypothesized eras of core concentration. In this process, we will also need to revisit the earlier and kindred migration work of Toynbee (1934) and Teggart (1939).

Chernykh's Schedule of Great Migrations and Core Concentration and Dispersal

E. N. Chernykh (1992), a Russian archaeologist, very briefly proposed at the end of a detailed analysis of ancient metallurgical development in southern Russia, that the transitions to and from major periods of metalworking technology were demarcated and essentially brought about by iterative periods of social catastrophe and migration. As outlined in Table 13.1, Chernykh envisions seven phases over some 5,000 years moving from the Balkan Neolithic/Eneolithic through the Bronze Age to the widespread diffusion of iron technology. Precisely what provokes the migrations is not clear, although part of the sequence is that initial migratory shocks provoke further migrations, thereby creating an escalatory spiral of population movement that feeds into the perception of social crisis. But the outcome is a severe disruption of cultural, political, and ideological patterns. The extent to which the old ways of doing, and thinking about, things fragment can make room for, but does not guarantee, the introduction of new technology, skills, and institutions.

Chernykh added this argument to the end of his 1992 study as a form of concluding speculation about where his empirical analysis might fit into the larger scheme of things. One can only hope that Chernykh will be in a position to continue this interesting line of thought for it certainly deserves elaboration and further documentation. For our particular purposes, one element that very much needs addressing is the question of just how homogeneous are these phenomena that are identified as "great migrations" and "cultural breakups." There are a number of migrations that are singled out as examples: the various forms of Indo-European waves, the "Sea Peoples," Phrygians, Celts, Sarmatians, Huns, and Turks. Yet these migrations did not always collide with more developed, urbanized populations. For instance, much of the thrust of the various Indo-

European waves are thought to have been responsible for movements into Central Asia and eastern Europe prior to the emergence of cities in these areas. Alternatively, some of these migrations were repulsed by urbanized center forces (for example, the Egyptians defeated the "Sea Peoples," the Romans eventually suppressed the Celtic threat, and the Hun coalition disintegrated shortly after the death of Attila).

On the other hand, Chernykh also lists a number of events or periods that are awkward to conceptualize as "great migrations," or even cultural breakups. The Kassite takeover of southern Mesopotamia and possibly Elam was a matter of nearby mountain nomads coming down to the plains at a time of vulnerability. It is not clear whether external agents were involved in the Harappan collapse or, for that matter, in the emergence of the Shang state. How should we view Alexander the Great's attack on southwest Asia or the Crusaders' attacks on the Near East? Both involved some population movement but not in the expected migration sense.

Table 13.1. *Chernykh's seven periods of great migrations and cultural breakups.*

Time	Migrants	Scope
1. 3500-3200 B.C.	First wave of Indo-Europeans	Balkans to Afghanistan
Consequences: Early agricultural neolithic and eneolithic cultures destroyed (regressive in Balkans and stimulating in Asia); marked extension of the zone of metal-producing cultures.		
2. 2600-2400 B.C.	Second wave of Indo-Europeans	Eastern Europe, Aegean, Asia Minor, Near East, Egypt
Consequences: Importance of mobile pastoralism increases in eastern Europe and Transcaucasia; start of Middle Bronze Age metallurgical revolution, especially in Aegean and Near East.		
3. 1800-1500 B.C.	Kassites, Harappan collapse, emergence of Shang state	Eastern Europe steppe, Central Asia, Eastern Mediterranean, Indus, Near East, China
Consequences: Middle Bronze to Late Bronze Age transition; preconditions for an abrupt and extensive expansion of metal-using cultures emerge, with wide		

diffusion of technology for casting thin-walled tools/weapons and the utilization of tin-bronze.

4. 1300-1000 B.C.	Sea Peoples, Indo-Aryan/Iranian wave, Phrygians	Eastern Mediterranean, Asia Minor, Western Asia, Central Asia, Indus, Iran/Afghanistan

Consequences: Iron begins to predominate in most regions of the Old World and is dominant by seventh-sixth centuries; Buddhism initiated and begins to spread.

5. 500-300 B.C.	Celts, Sarmatians, Alexander the Great, China-nomad conflicts	Western Europe, Balkans, Asia Minor, Central Asia, China

Consequences: Han, Roman, Parthian, and Kushan empires provide stability.

6. A.D. 400-700	Huns, Turks	Western Europe to China

Consequences: Many major social institutions change fundamentally; Christianity and Islam spread rapidly.

7. A.D. 1000-1300	Crusades, Turks, Mongols	Central Asia to Western Europe

Consequences: Not discussed.

Source: Extracted from the discussion in Chernykh (1992:302-07).

The Mongol explosion of the thirteenth century may have ended up as a great migration but, presumably, this was an inadvertent outcome of spectacularly successful conquests, and not the other way around. Finally, the reference to the Warring States period in China and Chinese conflict with nomads in the last third of the first millennium B.C. is simply vague. Some migration was involved, but whether any of it could be considered "great" is doubtful.

Thus, there is no strong reason to embrace the Chernykh thesis without further analysis. The thesis is certainly intriguing because it dovetails, or at least could be seen as compatible, to some extent with our own argument about long-term tendencies toward core concentration and dispersal in the world economy. As outlined in Table 13.2, Modelski and Thompson (1996a, 1996b) have proposed six periods, each lasting roughly a millennium in length, that encompasses a process of alternation between periods of core formation and core deconcentration.

In periods of center formation and concentration, dominant innovations facilitate the creation of new products, urban expansion, economic and

infrastructural development, and wealth consolidation. In contrast, periods of deconcentration encourage the gradual diffusion of innovative technology, the expansion of trade among decentralized states, and a leveling of the previous concentration of wealth. Periods of crisis and social upheaval, as suggested by widespread migration, could certainly serve as an agent in the transition from concentration to deconcentration. This is particularly the case if hinterland populations moved into urban areas (as opposed merely to movement confined within urban and hinterland zones). Hinterland groups might have strong incentives to engage in the leveling of wealth inequalities represented by urban concentrations. And even if their immediate interest was only in looting urban populations, the outcome could still lead to wealth leveling and deconcentration. If these hinterland migrants had sufficient military capability and used it, they could also be expected to do extensive damage to unifying institutions of culture, power, and ideology that would also facilitate deconcentration for a time. Therefore, a periodic, center-hinterland, interaction process could play an important role in the movement from concentration to deconcentration.

Table 13.2. *Periods of center concentration and dispersal.*

Center Concentration	**Center Dispersal**
3500 to 2400 B.C.	2400 to 1200 B.C.
1200 to 100 B.C.	100 B.C. to A.D. 930
A.D. 930 to 1850	1850 to ?

Source: Modelski and Thompson (1996a, 1996b).

As suggested earlier in Modelski and Thompson (1996b), there is some overlap between Chernykh's schedule and the tentative periodization sketched in Table 13.2. Chernykh's first period could be seen as ushering in our first period of concentration (3500-2400 B.C.). Here, the question would be whether the migrations Chernykh has in mind (an Indo-European wave from the Balkans to Afghanistan) influenced the core concentrations (Sumer, Egypt) that we have in mind. His second period (2600-2400 B.C.) leads into our first period of deconcentation (2400-1200 B.C.). Chernykh's third period falls toward the middle of this first period of deconcentration. Offhand, there does not seem to be any reason to be concerned with "excess" catastrophes and crises in periods of

deconcentration. Continuing problems of this sort would only help explain the duration of the deconcentration phase.

The fourth Chernykh period (1300-1000 B.C.) fits well with our second period of core concentration (1200-100 B.C.). The fifth Chernykh period (500-300 B.C.) does not fit well since it falls in the second half of a core concentration phase. It comes too soon to trigger the next deconcentration period (100 B.C. to A.D. 930), just as the sixth Chernykh period (A.D. 400-700) comes too late. Yet this sixth period could also be a "surplus" crisis in the midst of a period of deconcentration which would not necessarily pose an interpretative problem. The last Chernykh period (A.D. 1000-1300) comes close to ushering in a third phase of reconcentration (A.D. 930-1850) but the timing is less than ideal since we have the beginning of the reconcentration preceding the beginning of the migration period (which Chernykh says does not peak until the thirteenth century as well). Also less than ideal is the absence of a migration transition for the onset of the third deconcentration period (1850-). While the migration sequence may have played itself out, we would need to discover a functional equivalent replacement to maintain the overlap between the Chernykh and Modelski-Thompson arguments.

In sum, Chernykh's second, third and fourth periods fit the Modelski-Thompson schedule best. The first period may not be a problem depending on whether the migrants interacted with Sumer and Egypt. The seventh period almost fits and the sixth period may not prove to be a problem either. That leaves only one clear miss for the transition between the 1200-100 B.C. concentration period and the 100 B.C.-A.D. 930 deconcentration period. Chernykh's fifth period (500-300 B.C.) comes too soon and the sixth period (A.D. 400-700) comes too late.

Nevertheless, the degree of overlap seems exceptional given the complete independence of the two efforts, the number of years encompassed, and our collective lack of familiarity with theorizing about really long-term processes of the world system. Yet while the correspondence is beguiling, the degree of overlap cannot be construed as some sort of mutual validation. How do we know whether Chernykh selected the right periods of migration? Are there significant periods of migration and social crisis that fall outside his seven? For that matter, can we assume that each of Chernykh's seven periods is equally appropriate and correctly timed? Nor do we claim that our own periodization is carved in stone. The suggested periods are not completely arbitrary but they, too, demand the generation of considerable testing and supporting evidence.

As a consequence, one useful test that would help to assess the Chernykh and Modelski-Thompson theses is whether hinterland migrations cluster along the

patterns claimed by the two arguments. Ideally, we might simply turn to a convenient data base on hinterland migrations encompassing the last 5-6,000 years and check the degree of correspondence not between the two arguments, as we have done above, but between the arguments' periodizations and the history of major migrations. Unfortunately, we do not have an empirical series on migrations. In order to carry out the test, one must be created. But, before proceeding to that task, some consideration of previous efforts along these lines is warranted. As it happens, and somewhat surprisingly, there are only two earlier efforts, Toynbee (1934) and Teggart (1939).

Toynbee and Teggart

The analysis of migrations and their impacts on sedentary states has an ancient history going easily back to Herodotus' fifth-century B.C. discussion of group origins and the subsequent observations of Julius Caesar on the movement of the Helvetii in the first century B.C. Empirically, however, previous studies of migrations over respectable periods of time and their impacts can be restricted to the works of Arnold Toynbee, Jr. and Frederick J. Teggart, both of whom published their efforts in the 1930s.

Toynbee (1934:396) was intrigued by what he termed the repetitive "eruptions" of steppe nomads into sedentary territory with profound effects. He reasoned that this process could be explained either by pushes associated with steppe environmental conditions or by pulls exerted by a sedentary society located near the steppes. To assess whether pushes or pulls were more likely, he collected data on as many eruptions as he could find beginning with the second millennium B.C. He felt that an earlier starting point was precluded by the poor quality of available information prior to 2000 B.C.

While Toynbee did not offer an operational definition of what constituted an "eruption," he was certainly sensitive to data collection problems. Four specific ones were noted—all of which continue to be problematic for collecting data on migrations/incursions. First, the boundaries between sedentary and nomadic territories have usually been ambiguous and subject to change over time. How far do steppe nomads have to penetrate before they are judged to be intrusive? A second problem is that nomadic attacks have often been preceded by what Toynbee called nomadic seepage or what others refer to as the gradual infiltration of nomads into sedentary settings. At what point can we say that infiltration ends and migration begins? On the other hand, it is important to note that some eruptions involve the migration of tribes (men, women, children, and their livestock and other possessions that can be moved) while others are restricted exclusively to military operations, with an emphasis on armed warriors. Should

we distinguish between these relatively different types of activity and, if so, how? If a large number of warriors engage in military operations and also happen to be accompanied by their families, are they a different activity than if they were unaccompanied by dependents? Finally, there are definite problems in dating these eruptions as a process because the agents of eruption rarely maintained their own historical records. What we have instead are the often alarmed and terrified records of the targets of eruption. These records give us some idea when a steppe group attacks a sedentary group, but they do not always say anything much about when the steppe group began moving toward the sedentary targets. Some eruptions might literally take centuries to reach urbanized territory while others constitute abrupt attacks on near neighbors. Even if we wanted to distinguish between these types of movements, the available records often preclude it, or at least make it difficult to do so.

While Toynbee raised these questions in a useful way he did not always answer them. He chose not to distinguish between military operations and full-fledged migrations. Nor was there much he could do about the infiltration or asymmetrical information problems. In contrast, he did develop an innovative response to the boundary problem by standardizing 15 vents from the Afro-Eurasian steppes to sedentary territory through which nomads moved. Each vent was characterized by up to four thresholds, with each successive threshold signifying greater penetration into sedentary territory. Conceivably, a particular eruption might take as long as a century to conduct a maximum penetration. All together, Toynbee identified 45 vent-threshold combinations in an effort to fully specify the flow of an eruption.

After examining his enumerated data, Toynbee came to the following conclusions:

1. Nomadic eruptions throughout Afro-Eurasia alternated regularly with "sedentary encroachments" (attacks from sedentary territory on nomadic territory). The alternation was so regular that Toynbee felt that he could stipulate a 300-year periodicity, yielding the schedule listed in Table 13.3.

2. The "maximum effervescence" or most eruptive phase of each segment occurred in the first of the three-century periods. Since each paired phase of nomadic eruption and sedentary encroachment lasted 600 years, a regular 600-year rhythm of spectacular nomadic eruption (in 2025-1925 B.C., 1425-1325 B.C., 825-725 B.C., 225-125 B.C., A.D. 375-475, A.D. 975-1075, and A.D. 1575-1675) characterized the 3,500 or so years analyzed.

3. Given a 600-year rhythm, it would require a widespread vacuum in sedentary defenses for the pull factor to predominate over the push factor. Since

there is no evidence for a 600-year sedentary pull, the push factor must have predominated in general over the pull factor.

4. The most likely push factor was an alternation in steppe climate. Less arid periods increased the size of the nomadic groups and their flocks. A shift to greater aridity produced increased conflict among nomads over pasturage and water access. The losers of these intramural conflicts were forced to leave the steppes and to attack the less arid, sedentary zones. On the other hand, a reduction in aridity in the steppes encouraged sedentary encroachment as land became more conducive to agriculture.

5. Nomadic eruptions tended to come in double waves with the first group of attackers responding to pressure from a second group that was moving from a position that was more interior to the steppe than the first group.

6. While the push factor was predominant, the pull factor occasionally did encourage nomadic attacks despite the absence of a facilitative climate sequence.

As usual, it is difficult not to appreciate Toynbee's analytical boldness, his sensitivity to important questions pertaining to long-term change, and his empirical propensities. Still, there are some problems in evaluating this early effort. Since we are not told which eruptions are associated with what mix of push and pull factors, it is difficult to assess the degree of his explanatory success without a systematic recoding of the data. Moreover, no empirical information on climate data is provided and, as far as we know, no one has yet developed a historical climate indicator system for the Afro-Eurasian steppes that would permit an independent test of Toynbee's preferred explanation. While we would be reluctant to rule out climate factors altogether, it seems doubtful that any single factor can bear such a heavy explanatory burden.

Of course, whether Toynbee's explanation is compelling or something less so is not at the heart of our current question. More germane is the question of whether his database might be employed for a periodization test. Our assessment is that Toynbee's data are not suitable for such a purpose. Table 13.4, which summarizes Toynbee's information for the B.C. period, suggests why this is the case. Table 13.4 focuses on the B.C. portion of Toynbee's database because, of Chernykh's seven great migration periods, five take place before the third century B.C. Toynbee has no information on Chernykh's first two periods (3500-3200 B.C. and 2600-2400 B.C.). The information that he does supply that might be applicable for the next three are often rather broadly timed until one approaches the end of the B.C. period. Indeed, many of the early data entries are timed to coincide with Toynbee's periodization (see Table 13.3), thereby raising some questions about just how genuinely inductive Toynbee's periodization outcome was in the first

place. Finally, a close inspection of Table 13.4 gives one the impression that the first millennium B.C. was much more "eruptive" than the second millennium B.C. It is conceivable that this was the case, but it is also conceivable that Toynbee's access to data on the second millennium was restricted in some way. At the very least, we need to be wary not to give too much emphasis to each and every tribal movement along the Roman frontier in southern and southeastern Europe because we know a bit about them thanks to the Roman records and less attention to tribal movement along the Chinese frontiers of the same period (Toynbee lists only two eruptions for China in this period) or the less well-covered activities of the preceding millennium.

Even though we are reluctant to rely on Toynbee's data for the reasons stated above, it should be noted that Toynbee's peak years of nomadic eruption consistently diverge from Chernykh's peak years. Indeed, a stronger case might be made for matching Toynbee's schedule of sedentary encroachments to Chernykh's peak migration periods in the B.C. period. Hence, however one views the utility of Toynbee's data, there is not much agreement on timing manifested in their schedules.

Frederick J. Teggart represents a different sort of problem. Teggart was as bold as Toynbee but he was neither as successful nor as prolific. In the early 1920s, he began to develop a series of maps that would encompass Europe's and Asia's first millennium A.D. migrations. Despite a 1923 fire that destroyed his data, he apparently was able to complete the maps in 1926 (Dangberg 1983:17-26) although it is not clear what may have happened to them. He published only one analysis of his data (Teggart 1939) and that was not until one year before his retirement and a few years before his death in 1946. The 1939 analysis was probably meant to be a first volume in a series because it focused solely on the period between 58 B.C. to A.D. 107. It also took a position diametrically opposite that of Toynbee.

***Table 13.3**. Toynbee's nomadic eruptions into sedentary societies (limited to the B.C. period for illustrative purposes).*

Group	Thresholds I	II	III	IV
Aryans/Iranians	2025-1725	2025-1725	2025-1725	
Hyksos/Mitanni			pre-1750	
Hyksos				pre-1680
Thracians/Slavs	2025-1725	2025-1725	1425-1125	
"Centaurs"				1425-1125
Hebrews/ Arameans	post-1400			
Libyans	post-1300			
Chaldaeans	post-1200			
Arameans	post-1200			
Cimmerians	825-525	post-610	pre-700	
Scythians	825-525	post-610	post-700	c. 630
Cimmerians/ Scythians	825-525	825-525		
Sarmatians	825-525	825-525		
Budini		825-525		
Thracians			825-525	
Getae			825-525	
Agathrysi			825-525	
Odrysae				825-525
Intra-Scythian		pre-450		
Geloni/Scythian		pre-450		
Bastarnae/ Scythian		c. 280		
Celts/Agathrysi			pre-300	
Celts/Odrysae				c. 280
Hiongnu	c. 225			
Sarmatians		c. 225		
Scythians			c. 200	
Numidians	post-200			
Sakas	c. 135	130	75	50
Yuechi	c. 135		post-A.D. 50	C.A.D. 100
Arabs	127			
Arabs	post-100			
Albani		pre-66		
Iazyges			pre-30	

Note: The thresholds are complicated and difficult to convey in limited space. Toynbee lists

15 vents from the steppes and while each vent may have up to four thresholds, some of the thresholds are characterized by multiple directional flows. In all, some 45 different locations from China to North Africa are identified in this vent-threshold scheme. The most important examples would include the following:

a. Vent: between Khingan and Tien Shan (China): Thresholds: (1) Great Wall, (2) Tarim Basin, (3) Hwango-Yangtse watershed;

b. Vent: between Pamirs and Caspian: Thresholds: (1) Jaxartes, (2) Iran, (3) Punjab/Thar-Iraq-Anatolia, 4) Ganges Basin-Maharashta-Syria/Egypt;

c. Vent: between Caspian and Urals: Thresholds: (1) Emba, (2) Volga/Don-lower Volga-Kama, (3) Crimea-lower Danube-Hungary, 4) Thrace/Thessaly.

Source: extracted from Toynbee (1934:406-20).

Teggart emphasized the east-west interdependence of the Eurasian economic system as the underlying factor in linking "barbarian uprisings" in Europe with those of the Chinese. Whereas Toynbee argued for a strict periodicity, Teggart emphasized a very strict causality mechanism in which every uprising in Europe was linked to an antecedent uprising either on the Near Eastern frontiers of the Roman Empire or on the western frontiers of the Chinese Empire.

> every barbarian uprising in Europe followed the outbreak of war either on the eastern frontiers of the Roman Empire or in the 'Western Regions' of the Chinese ... wars in the Roman East were followed uniformly and always by outbreaks on the lower Danube and the Rhine, wars in the eastern Tien Shan were followed uniformly and always by outbreaks on the Danube between Vienna and Budapest. . . . invasions or uprising occurred on the Roman

> frontiers in Europe on forty occasions. On nine of these occasions disturbances on the upper Danube followed wars at Guchen and Turfan, in the eastern T'ien Shan. On thirty-one occasions disturbances both on the Rumanian Danube and on the Rhine followed wars on the eastern frontiers of the Roman Empire, more especially in Syria or Armenia. . . . of the wars in the Roman east, eighteen followed wars in Chinese Turkistan, so that, of the forty occasions on which outbreaks took place in Europe, twenty-seven were traceable to the policy, or rather changes of policy, of the Han government (Teggart 1939:vii-viii).

Thus, conflict somewhere in the trading system would disrupt local tribal political economies elsewhere, leading to compensatory tribal raids. Who they raided depended on where they were located but, in most cases, the answer was neighboring tribes. Weaker tribes were forced to migrate to new territory where some eventually encountered an expanding and relatively rigid Roman Empire, especially along the Rhine. The outcome was increasing Roman-barbarian conflict, without much, if any, appreciation for the long-term and very wide scope of the general problem.

In some respects, Teggart's interpretation of barbarian activity in Eurasia is much more sophisticated than Toynbee's overemphasis on the single factor of climate. His early emphasis on the interdependence of the Eurasian political economy is also impressive and quite welcome. His approach to data analysis, unfortunately, was less impressive. He did not enumerate the "uprisings" that he analyzed although he did provide very specific numbers. Instead, he offered a descriptive survey of who was doing what to whom during study of a 165-year period. Presumably, one might extract from his discussion data on the uprisings but, as far as we know, no one has attempted this interesting exercise.

***Table 13.4**. Toynbee's periodization of eruptions and encroachments.*

Nomadic Eruptions	**Sedentary Encroachments**
2025-1725 B.C.	1725-1425 B.C.
1425-1125 B.C.	1125- 825 B.C.
825- 525 B.C.	525- 225 B.C.
225 B.C.-A.D. 75	75-375

375-675	675-975
975-1275	1275-1575
1575-1875	

Source: based on Toynbee (1934:430).

One argument against such an exercise is Teggart's approach to causality. He seems to have relied almost exclusively on antecedence, not unlike the methodological sense of Granger causality, but without the demanding statistical tests that are associated with that particular approach. One of Teggart's (1939:viii) own illustrations of what he was attempting to show is most revealing on this score. He provided the following list of events that were intended to highlight the interdependence of Eurasian events:

A.D. 102	The Chinese administrator of the Tarim Basin retires, which is followed by an outbreak of disturbances from Kansu to the Pamirs.
105-07	As a consequence of the outbreaks, China is forced to withdraw from its western regions.
105-06	Parthian King overthrown; Rome annexes Petra and Arabia.
106-07	Rome invades and annexes Dacia.
106-08	Rome evacuates Scotland.
105	Hsiung-nu take Guchen and Turfan from Chinese.
107	In correspondence, barbarians invade Pannonia (Hungary, west of the Danube).

It is not much of a stretch of the imagination to follow the implications of the loss of a skilled administrator, particularly if one also knows that the same individual had first achieved Chinese control over the Tarim Basin (critical to the functioning of the Silk Road networks) some thirty years earlier. Whether the temporary loss of control by the Han Empire could lead almost immediately to Roman expansion in eastern Europe (Dacia) and Jordan/Palestine (Petra) is a different matter. A disruption on the eastern end of the Silk Roads on land would make Petra's control of the Arabian end of the maritime alternative more attractive. Still, it is difficult to imagine that the Romans could respond so quickly

to a crisis situation or that one could find evidence relating Roman decision-making in relation to Petra to events in the Tarim Basin. Moreover, a causal link would be more convincing if the gap in timing was just a bit longer, rather than almost simultaneous. In subsequent years, it is possible to track the consequences of Chinese frontier events across Central Asia to western Europe but the pace of movement is much slower—more on the order of decades and even centuries rather than instantaneous. How the Roman evacuation of Scotland fits into this picture is even less clear. It seems quite a stretch of the imagination to see the Picts well connected to disruptions of the Silk Roads. The Romans might have been responding to demands elsewhere but, once again, it is not quite clear to what they might have been responding: Roman expansion in Dacia or Petra? attacks on Roman troops in Pannonia? the loss of Chinese control in the Tarim Basin?

Teggart's book was met with a mixture of hostility and indifference. The hostility seems to have been a function of conventional historian biases against generalization and, in particular, generalizing about economic motivations. However, it is possible that Teggart may ultimately be proven to have been on the right track. That is, the disruption of trade along the main artery of the Afro-Eurasian system may well have had immediate, as well as longer-term consequences throughout the system. Our observation is simply that such a proposition remains to be established with stronger evidence than Teggart supplied. And since Teggart neither enumerated his cases nor did he extend his analysis beyond the 58 B.C.- A.D. 107 era, there is little that we can use in a direct fashion to address our question about the temporal clustering of great migrations. Nonetheless, his prescient emphasis on early Eurasian interdependencies, along with those of Toynbee and others, should not be forgotten. It is a subject that is rather difficult to escape when dealing with the history of interactions between the Eurasian hinterlands and urbanized centers.

Creating a New Database on Hinterland Migrations/Incursions

To be perfectly frank from the outset, it is probably impossible to create a genuinely comprehensive database on group migrations. There are simply too many groups, too much migration, and too few records about much of this activity. For that matter, the very topic of migration remains quite controversial in anthropological circles, with the argumentative foci on whether, when, and with what consequences actual migrations did occur (among others, see Adams, Van Gerven, and Levy, 1978; Anthony, 1990, 1992; Chapman and Dolukhanov, 1992; Crib, 1991; and Rouse, 1986). The argument in anthropology and archaeology seems to revolve around (1) whether external agents are necessary to bring about cultural change and (2) whether evidence of radical cultural change should or can

be interpreted as having been brought about by invaders who were not only destructive, but who also stayed around to build the new culture. The reaction to explanatory over-reliance on external attackers, particularly in the face of a mixture of continuities, discontinuities, and limited evidence that the attackers stayed or actually migrated, is understandable. Yet there is no reason to move to the opposite end of the continuum and deny any significant role for external attackers. External agents may not be necessary but they can be devastatingly sufficient in some circumstances. For our immediate purposes, it is also not necessary that we resolve the extent to which migrants may have migrated lock, stock, and barrel. It is sufficient to know that some groups moved and encountered resistance to their movements from populations in their way. With that sort of a focus, it is possible to develop a systematic compilation of what we know, or at least, think we know about the more violent interactions between hinterlands and centers in the history of the Afro-Eurasian system.

To be systematic implies adherence to explicit rules of data collection. The following considerations have governed the development of our series:

1. There is no point at this juncture in attempting to deal with the entire planet. We focus on the Afro-Eurasian political economy as it developed between roughly the fifth millennium B.C. and up to A.D. 1500. Significant migrations certainly preceded the fifth millennium B.C. (e.g., out of Africa, across the Bering Strait, and with the initial development of agrarian cultivation in the Near East and Europe) but they do not concern us all that much because they preceded, for the most part, the development of center-hinterland divisions of labor. Equally certain has been the continuing interaction of centers and hinterlands beyond A.D. 1500. However, from a political economy perspective, 1500 marks a traditional juncture in the operation of the Afro-Eurasian world economy, with maritime trade routes beginning to overshadow land trade routes to some extent (but not for the first time). It also demarcates roughly, and not coincidentally, the beginning of major changes in the terms of center-hinterland engagement. Gunpowder and increased sedentarization gradually weakened the destructive potential and military advantages of hinterland attackers. Nevertheless, our 1500 stopping point is regarded as preliminary. Future data collection will extend the series to the present time.

2. The reference to Afro-Eurasia refers to a territory approximately bounded by a slightly tilted rectangle drawn from the British Isles and Morocco on the Atlantic to Korea and southern China on the Pacific. For the present, no attempt is made to cover southeast Asia, southern India, or Africa south of the northern Mediterranean littoral. We do not assume that these areas were entirely “outside”

the Afro-Eurasian world prior to 1500, but they appear to have been at best marginal to the center-hinterland processes on which we are currently focusing.

3. What we are looking for specifically are attacks of non-urbanized groups on the types of major cities highlighted by Chandler (1987) and Modelski (1997). Most of these attacks have come from either the interior (Central Asia) or the outer fringes of the Afro-Eurasian world. Steppe, desert, and mountain nomads, as a consequence, have been the predominant perpetrators of hinterland attacks on the centers to about 1500. We do not assume, of course, that all nomadic groups are fully nomadic. There can be combinations of relatively sedentary agrarian ways of life mixed with the annual migrations associated with finding adequate pasturage for flocks. Nomads may also control oases towns. Our emphasis lies in contrasting urbanized political economies with relatively non-urbanized political economies. In some respects, this hews to the classical way of thought in which "barbarians" were identified minimally and universally as non-city dwellers by people who did happen to inhabit cities.

4. Hinterland-center violence is by no means a one-way process. As emphasized by Toynbee (1934), centers have long histories of attacking hinterland groups as well. For purposes of manageability and in the context of our specific theoretical questions, we have restricted our current data development to hinterland attacks. If it is clear that a hinterland attack is part of a sequence of violence initiated by center/urbanized groups, it has been excluded from the series. Of course, it is not always clear who started a war, but our selective bias is for a focus on hinterland initiations as much as possible. In the near future, we plan on developing a complementary series on center encroachments on the hinterland.

5. Hinterland attacks come in a variety of forms, ranging from isolated raids across a frontier to full-scale migration and settlement within center territory. Ideally, we might scale the intensity of the attacks or the scale/scope of the migrations. The limited information in the available sources, unfortunately, make this rather difficult. Our basic unit of analysis will be an incursion from the hinterland into center space. These incursions can be temporary or permanent and carried out by very small to very large groups. Presumably, the source material is also biased toward the more violent and dramatic end of the scale. That bias works in our favor since it is the more violent episodes in which we are primarily interested. Indeed, it must be assumed that a great deal of activity has been missed or even distorted. Some nomadic pressure on frontiers seems almost to have been continuous. Yet it does us little good to expend a large amount of resources attempting to capture every possible tribal movement or attack. Our operating assumption will be that if we examine a reasonably broad selection of

materials discussing center-hinterland interactions directly or indirectly, we should expect to capture most of the more important activity that occurred. We also hope to be able to complete a rudimentary coding scheme that differentiates between minor and major hinterland movements, but that, too, remains an ongoing process.

6. As noted in the discussion of Toynbee's analysis, it is not always clear when a hinterland incursion actually began. We include information on this subject when it appears to be plausible or to have been substantiated. We also report information on the jostling of hinterland groups on the way to an incursion against some center. Otherwise, we ignore fighting within the hinterland over succession rights or subgroup autonomy (i.e., subjugations and revolts) unless there is some reason to believe that the activity had repercussions of significance for subsequent incursions.

7. Because we have yet to scale the intensity of hinterland attacks/migrations systematically, a caveat emptor warning is advisable. Databases ideally contain information on equivalent type events that can be fully enumerated and aggregated depending on the analytical objective. One can do this with hinterland attacks, but only at the risk of confusing trees for forests. All of the "trees" in this landscape are not equal and require supplementary interpretation. Thus, it might be more accurate to refer to the hinterland migration/incursion database as a crude repository of information on the sequencing of incursion events. How it should be utilized for analytical purposes is something that needs to be given explicit consideration and justification.

8. It may go without saying—but on the chance that it does not—we do not claim to "know" much more than what we are able to extract from the literature.[2] We do not know where the Indo-European or Sumerian homelands were located. We do not know exactly what happened in the Indus River valley that brought about the collapse of the Harappan system. We do not know much about the extent to which the Chinese were influenced by western innovations via interactions with nomads prior to the Han era. We do not know whether or to what extent Indo-Europeans physically penetrated Europe or Central Asia. Nor do we know whether it is more appropriate to rely on high, middle, or low chronologies as opposed to adjusted carbon-14 dates. We do not even know exactly when the first Viking attack took place. These questions, among many others, remain controversial and/or obscured by the relative absence of good quality information. We do not assume the capability or responsibility for resolving them. Our data collection mission is one of attempting to systematize what we think we know about migrations and incursions. No doubt some portion of what we know at this point in time will be discarded or reinterpreted in the

future as new archaeological findings help to illuminate what took place in prehistoric times, and even perhaps when it took place.

Testing the Clustering of Hinterland Migrations/Incursions

Our database currently consists of some 25 pages of single-spaced chronology. A future version that will include scaling information and specific sources by event will take considerably more space. Even so, the casual impression a reader will obtain in perusing its current, "bare-bones" contents is that there is something going on somewhere nearly all the time. But that is not the immediate question. That is, we are not concerned at this juncture with serial fluctuations in the total amount of conflict between Afro-Eurasian hinterlands and centers. Our empirical question is whether hinterland attacks on the core cluster along the historical timelines suggested by Chernykh and/or Modelski-Thompson's periodizations. Since a good portion of the data do not address this question directly, we need to devise a way to separate the attacks on the center from activity within the hinterland.

We first adopt the identification of the concentrated Afro-Eurasian centers advanced in Modelski and Thompson (1996a) and justified there provisionally in terms of urban development and population growth data: Sumer/Egypt (3500-2400 B.C.), Mediterranean Europe/Near East, the Indian subcontinent, and China (1200-100 B.C.), and Sung China and the Italian City-States/Western Europe (930-1850). This identification provides a clear focus on the targets of hinterland incursions. It implies as well that we can put aside questions involving activity in Central Asia and eastern Europe for the present inquiry. These activities are certainly of interest and very much pertinent not only to explaining migratory incursion dynamics in general but also, indirectly, to who attacks the centers and when. But since their roles as conduits and intermediary contested zones impact only indirectly on center zones, we can return to their analysis in a future paper on the relationships between migrations/incursions and trade routes.

We also need a reasonably neutral chronological device for reorganizing our information in order to assess temporal clustering tendencies. Too much time is involved to readily contemplate annual or decadal summarizations. That would suggest choosing between centuries and longer aggregations. For six millennia, longer-than-century aggregations have their attractions for data reduction purposes but half or quarter millennia spans would sometimes approximate the specific periods mentioned by Chernykh and Modelski-Thompson and sometimes not. The century aggregation, while entirely arbitrary as a chronological unit, should serve our specific question about the possibility of temporal clustering. We read Chernykh as arguing that the following centuries are especially characterized

by periods of great migration and cultural breakups and hence our hinterland migrations/incursions: 3500-3200 B.C., 2600-2400 B.C., 1800-1500 B.C.,1300-1000 B.C., 500-200 B.C., A.D. 400-700, and A.D. 1000-1300.

In contrast, the Modelski-Thompson argument predicts that three periods of center concentration (3500-2400 B.C., 1200-100 B.C., and A.D. 930-1850) should be relatively sheltered from hinterland incursions on the center, at least in comparison to two periods of center dispersal (2400-1200 B.C., 100 B.C. to A.D. 930), and that the transitional periods from an era of center concentration to one of center dispersal should be especially marked by hinterland migratory attacks on the center. We freely acknowledge that since Chernykh did not specify with whom his activities collided, our center-focused test is unlikely to be fully fair to his thesis.

To examine these predictions, we extracted the information pertinent to each center and coded each century (beginning with the thirty-fifth century B.C. since we have little "data" before that time), based on the information in our database, for the existence of major migratory/incursion activity emanating from the hinterland toward center targets. In focusing on the center, we explicitly ignore information at our disposal on incursions that take place within Central Asia, eastern and most of western Europe. The threshold for "major" is also probably lower than what Chernykh had in mind for "great" migrations. We look for evidence of serious invasion and destruction by relatively large groups as opposed to relatively routine, hit-and-run frontier raiding by small groups. Table 13.5 reports the outcome of this comparative exercise, with "x's" indicating incursive activity and "-" indicating that these times and places are not really at risk in the test.

One obvious finding emerges quite clearly from Table 13.5. Sumer/Egypt and India enjoyed, as far as we know, an initial period of relative freedom from hinterland attacks. Mention is often made of how the earliest civilizations emerged in river valley settings that were especially rich, initially, for agricultural purposes. The initially favorable environments did not always persist as noted by increased aridity in the Indus area and the deterioration of soil quality in southern Mesopotamia. To these initial factors conducive to urban development, we should also add very limited exposure to hinterland incursions. With the possible exceptions of the initial Sumerian movement into lower Mesopotamia and some sort of elite incursion in Egypt toward the end of the fourth millennium B.C., Sumer and Egypt escaped serious incursions until toward the end of the third millennium B.C. India experienced one or more waves of Indo-European migration, about which we know very little, but not until the second millennium B.C. China, initially, was even more protected. While there may have been more

contact in the mid-second millennium than we currently are aware, China's hinterland problems were at best episodic before the last third of the first millennium.

Table 13.5*. Centuries of major hinterland-center incursions.*

Years	Sumer/Egypt	Mediterranean	India	Ch
3500-3400		-	-	-
3400-3300		-	-	-
3300-3200		-	-	-
3200-3100	?	-	-	-
3100-3000		-	-	-
3000-2900		-	-	-
2900-2800		-	-	-
2800-2700		-	-	-
2700-2600		-	-	-
2600-2500		-	-	-
2500-2400		-	-	-
2400-2300				
2300-2200		x		
2200-2100	x	x		
2100-2000	x	x		
2000-1900	x	x		
1900-1800	x			
1800-1700	x	x		
1700-1600	x			
1600-1500	x	x		
1500-1400		x	x	?
1400-1300		x		?
1300-1200	x	x		?
1200-1100	x	x		?
1100-1000	x			?
1000- 900	x			?
900- 800				?
800- 700			x	x
700- 600	x		x	x
600- 500	-		x	
500- 400	-			
400- 300	-	x		x
300- 200	-	x		x
200- 100	-	x	x	x
100- 0	-		x	x
0- 100	-		x	x
100- 200	-			x
200- 300	-	x	x	x
300- 400	-	x		x
400- 500	-	x	x	x
500- 600	-	x	x	x
600- 700	-	x		x

700- 800	-	X	X	X
800- 900	-			X
900-1000	-			X
1000-1100	-			X
1100-1200	-			X
1200-1300	-		X	X
1300-1400	-		X	X
1400-1500	-			X

The initial relative absence of center-hinterland problems was more a matter of location and buffer zones than it was a matter of the relative absence of hinterland migratory activity. Mountains, deserts, and, in the case of Egypt, water facilitated the initial insularity of the earliest urbanized zones. In every case, the geographical barriers eventually were breached, primarily by groups moving south and east. Where there were fewer geographical barriers, as in the northern coastal areas of the Mediterranean (Greece and Anatolia especially), migratory incursions had been taking place all along.

The initial insularity of Sumer and Egypt has implications for our examination of periodicity schemes.[3] It is supportive for Modelski-Thompson's first period of center concentration and works against the significance of Chernykh's first two periods. There is evidence of migratory incursions in 3500-3200 B.C. and 2600-2400 B.C., but they take place outside the Sumerian-Egyptian center. The next two Chernykh periods (1800-1500 B.C. and 1300-1000 B.C.) are certainly periods of considerable turmoil in the Mediterranean and southwest Asia areas. The question here is whether there is a clear Eurasian political-economy core, as opposed to various imperial centers, to be attacked. There is also not much of a break between 1500 and 1300 B.C. Are we not on more firm ground to simply

refer to the second millennium as an extended period of crisis throughout much of Eurasia?

As summarized in Table 13.6, Chernykh's fifth period (500-200 B.C.) applies to the Celtic migrations into southern Europe and Anatolia but whether these incursions are "culture breakers" is debatable. The Romans were ultimately able to check this source of threat. Moreover, the fifth period does not have much meaning for India and China.

Chernykh's sixth period (A.D. 400-700) has a strong Eurocentric flavor in that it captures some of western Rome's problems with Germanic and other types of tribes and the initial emergence of the Arab expansion. The problem here is that it is difficult to make a case for the fifth through seventh centuries being all that different from the third, fourth, and eighth centuries. The seventh period (1000-1300) encompasses considerable hinterland activity and the most spectacular incursions brought about by the Mongols. Yet here again, most of Europe and the Mediterranean area was not attacked directly in this time period.

Table 13.6. *Summary outcome on Chernykh's periodization.*

Hypothesized Periods	Conclusions
3500-3200 B.C.	Migratory incursions do not reach the Sumerian-Egyptian center.
2600-2400 B.C.	Migratory incursions do not reach the Sumerian-Egyptian center.
1800-1500 B.C.	A period of intensive hinterland onslaught against the former Sumerian-Egyptian center and elsewhere.
1300-1000 B.C.	A period of intensive center-hinterland turmoil in the former Sumerian-Egyptian center, the general Mediterranean area, and elsewhere.
500-200 B.C.	A period of primarily Celtic attacks on the Etruscans, Romans, and Greeks in the Mediterranean area which are eventually brought under control; the period is too early to apply to India and China.
A.D. 400-700	A period of hinterland attacks on the former centers and elsewhere but it is debatable whether it is all that easy to

	differentiate from activity in immediately preceding and following centuries.
A.D. 1000-1300	A period of extensive hinterland turmoil but focused primarily on Central and Eastern Eurasia in terms of the actual destruction.

In sum, we have little trouble finding evidence for migratory incursions following Chernykh's suggested chronology but they are often in the "wrong" places, in terms of our own interpretation. Six of the seven periods represent attacks on areas that are not, or are no longer, centers of the Afro-Eurasian economy. Only the 500-200 B.C. phase might be seen as an attack on the Mediterranean center. Yet that phase applies primarily to the western end of Eurasia. Chinese problems with the Hsuing-nu confederacy overlapped (from 300 B.C. on) only marginally with the Celtic movements and India does not appear to have been on the same center-hinterland clock.

Table 13.7 summarizes the preliminary implications of our data collection and Table 13.5 for the Modelski-Thompson periodization. As noted above, the first period of core concentration (3500-2400 B.C.) takes place prior to the encroachment of the hinterland on the center. The second period of core concentration (1200-100 B.C.) is also characterized by "windows of opportunity" for urban developments relatively free of hinterland threats in all three centers (the Mediterranean, India, and China). The third period of hypothesized core concentration (930-1850) was a window of opportunity vis-a-vis hinterland activity only in the west. China's nomadic problem became even more acute in this period, particularly with the unprecedented conquest of all of eastern Asia by the Mongols in the thirteenth century.

***Table 13.7**. The summary outcome on the concentration-dispersal periodization.*

Hypothesized Periodization	**Conclusions**
3500-2400 B.C.	The Sumerian-Egyptian center was relatively free of hinterland incursions prior to 2200 B.C.

Transition to 2400-1200 B.C.	Gutian attacks on southern Mesopotamia began around 2200 B.C., followed by Amorite, Hurrian, and Kassite attacks; Hyksos movement into Egypt only after 1700 B.C..
1200-100 B.C.	The Mediterranean center was relatively free of hinterland incursions between 1100 and 400 B.C.; India was in between the initial Indo-European onslaught and the commencement of intermittent invasions from Bactria/Afghanistan in the 200-100 B.C. period; China's nomadic problem apparently became acute only towards the end of this period (although details on pre-Hsuing-nu activity are exceedingly murky).
Transition to 100 B.C. - 930 (dispersal)	Nomadic pressure on China and India had been increasing, respectively, from the third and second centuries B.C. but Germanic/Hun pressure on Rome did not increase until third century A.D.
A.D. 930-1850	The Italian city-states were relatively free from hinterland attacks at least by the second half of the tenth century. Hinterland attacks on China were nearly continuous between the third century B.C. and A.D. 1500; what varied was the Chinese capacity to deal with the incursions.

Another way to look at this comparison is to see how the number of centuries of major incursions fall into the paired phases of concentration and deconcentration. The contrast is not perfectly dichotomous. But, with the exception of China in the last phase, the periods of concentration encompass considerably less hinterland incursion activity than do the periods of deconcentration.[4]

	Concentration	**Deconcentration**
	3500-2400 B.C.	2400-1200 B.C.
Sumer-Egypt	0	8
	1200-100 B.C.	100 B.C.-A.D. 930
Mediterranean	4	6
India	1	6
China	5	11
	A.D. 930-1500	
Sung China	7	

Genoa/Venice and Atlantic Europe	0

The link between phase transitions and hinterland incursions is less well supported. Hinterland problems tend to increase only after the center's preeminence has already eroded. "Barbarian" attacks do not appear to be primary agents in the decline of centers. Rather, declining centers appear to encourage hinterland incursions. Therefore, it is difficult to envision migrating hordes performing a primary role in the leveling and dispersal of concentrations of wealth. In a number of cases, the evidence suggests that hinterland groups moved into sedentary centers only after they had collapsed on their own. In other cases, relatively strong centers are able to repulse hinterland incursions.

A third reason for not exaggerating the role of hinterland incursions in bringing down urban centers, and one that cannot be fully developed in this paper, is that a very respectable proportion of hinterland attacks are the culmination of intra-hinterland dynamics and struggles for predominance. Somewhat contrary to one of Teggart's positions, many hinterland attacks on the center represent chain reactions. Conflict at the eastern end of Eurasia forced losers to move west. Either the losers displaced other groups even further west or the losing groups eventually moved quite a distance west to find themselves in confrontation with western centers and former centers. These sequences that can be extracted fairly easily from the Central Asian information in our database are not quite akin to the flapping butterfly wings in the Amazon causing nonlinear weather problems in Kansas but there is a similarity in the common nonintentionality. That hinterland conflict in eastern Eurasia reverberated in western Eurasia, subject to variable lags, speaks to the early interdependence of the Afro-Eurasian world. But it is difficult to credit the implications of a struggle for hegemony in Mongolia as a consistent prime mover in the rise and fall of distant, more sedentary political-economic systems over thousands of years.[5]

Nevertheless, it is conceivable that hinterland incursions have played an important secondary role in the deconcentration process. If we assume that the leaders in the core concentration phases are primarily responsible for their own declines, hinterland incursions against weak and weakening centers are, on the one hand, significant responses to deconcentration processes as well as agents in prolonging the duration of deconcentration. Moreover, since hinterland attacks did not occur across the Afro-Eurasian geographical board evenly, they may also have something to do with where the next core concentrations were more or less likely to occur.

Might the Sumerians have recovered eventually from Gutian, Amorite, and Kassite invasions? What would have become of the Roman Empire if Germanic tribes had not been migrating south towards the Black Sea for nearly a millennium? What might the southern Sungs achieved if they had not been almost constantly at war, ultimately unsuccessfully, with the Liao and the Mongols? Alternatively, could the "early modern" ascendancy of Western Europe have occurred if the Mongol attacks had penetrated much further west than they actually did? For that matter, might that early modern ascendancy have been seriously delayed in the absence of the widespread Mongol impact?

Two things are clear. The interaction between center and hinterland was neither completely random nor was it "peripheral" to the long-term dynamics of the Afro-Eurasian world. That hinterland incursions systematically played a role in the pulsations of the emerging world economy seems quite likely. Just how central the center-hinterland processes will prove to have been remains to be seen. There is much more work that needs to be done on these processes before a full evaluation can be essayed. For instance, how did the older version of the domino theory work in propelling eastern-based conflicts toward the west, sometimes subject to long lags? How did migratory incursions interact with the functioning of the Silk Roads on land and the Spice Routes at sea? What proportion of Central Asian conflict was focused on the control of the main land trading routes that connected the various Afro-Eurasian subsystems? What role did the timing of migratory incursions play in the apparent alternation of these land and maritime routes? To answer these questions we will need to broaden our focus on hinterland activities beyond those examined in this paper, and to incorporate additional information on Central Asia (which can also be found in abundance within our database).

Notes

1 For some analysts, these social crises operate as long-term equivalents of Mancur Olson's (1982) systematization of arguments concerning the economic growth benefits of war and revolution. Periodic shake-ups of whole cultures, political-economic institutions and styles, and elite hierarchies make room for novelty and innovation. Destructive barbarian migrations can create significant discontinuities but they do not determine what will happen next. In some cases, thriving urban settlements will be transformed into pasture land; in others, opportunities for major breakthroughs in political-economic practices will be created.

2 This paper was first delivered at the 1997 International Studies Association annual meeting in Toronto, Canada. At that time, the sources utilized included the

following: Abetekov and Yusupov (1994), Adshead (1993), Aldred (1987), Allchin and Allchin (1982), Askarov (1992), Askarov et al. (1992), Barfield (1989), Beckwith (1987), Benac (1981) Bernard (1994), Blegen (1973), Brett and Fentress (1996), Briand (1979), Brinkman (1982), Bregel (1991), Brun (1995), Büchsenschütz (1995), Canfield (1991), Caskey (1971,1973), Catling (1971), Chakrabarti (1996), Chang (1986), Chegini and Nikitin (1996), Chernykh (1980), Collins (1991), Crossland (1971), Cunliffe (1988), Curtis (1988), Dani and Bernard (1994), Dani and Litvinsky (1996), Dani, Litvinsky, and Safi (1996), Dandamayev (1994), Davis (1988), Drawer (1973), Drews (1988, 1993), Dyson (1973), Dyson (1985), Eberhard (1977), Edwards (1971, 1982), Enoki, Koshelenko and Haidary (1994), Finley (1981), Frey (1995), Frye (1991), Gadd (1971), Gallay (1981), Garasanian (1982), Gimbutas (1973a, 1973b, 1977, 1980), Grayson (1982), Grousset (1970), Gurney (1973a, 1973b), Halder (1971), Hammond (1982a, 1982b), Harmatta (1992, 1994a, 1994b), Harmatta and Litvinsky (1996), Hawkins (1982), Hayes (1973), Hinz (1971, 1973), Ho (1975), Howells (1983), Isaac (1992), Ishjamts (1994), Jagchid and Symons (1989), Kaul (1993), Kenyon (1973a, 1973b), Koshelenko and Pilipko (1994), Kwanten (1979), Kule and Rothermund (1986), Kupper (1973) Kyzlasov (1996), Langer (1968), Lenerz-de Wilde (1995), Lewy (1971), Litvinsky (1996), Litvinsky, Jalilov and Kolesnikov (1996), Litvinsky and P'yankova (1992), Litvinsky and Guang-da (1996), Logan (1983), Makkay (1992), Mallory (1989), Manzura, Savva, and Bogataya (1995), Marshak and Negmatov (1996), Masson (1992), Mellaart (1971a, 1971b), Mihailov (1991), Mitchell (1993), Mu Shun-ying and Yao (1996), Musset (1971), Nerazik and Bulgakov (1996), Oakeshott (1960), Parker (1986), Pigott (1965), Posener (1971), Prende (1982), Pullyblank (1983), Puri (1994), Redford (1992), Rice (1994), Schutz (1983), Shang (1996a, 1996b), Sinor and Klyashtory (1996), Snodgrass (1982), Steiner (1990), Stubbings (1973), Sulimirski and Taylor (1991), Thomas (1982, 1992), Vaux (1971), Vermeule (1964), Whitehead (1975), Whitehouse (1975), Wilhelm (1989), Yong and Yutang (1994), Zadneprovskiy (1994), Zanotti (1981, 1986), and Zeimal (1996). This list does not exhaust the number of sources actually consulted but refers only to sources that yielded pertinent incursion information. The source list and the data inventory, which requires too much space to append to this chapter, continue to be expanded.

3 Insularity has consistently been emphasized as a criterion for system leadership in long cycle theory. See, for instance, the discussion in Modelski (1987).

4 The destruction of Genoa in 934 by Arab raiders certainly could be counted as an incursion. The question is whether we should regard the Arab raiders as any more or less peripheral/central at this time than the Italian town they sacked.

5 The Mongol imperial expansion in the thirteenth century is the obvious exception to this generalization. Yet it remains but one of many struggles for control of Central Asia. Central Asia has clearly been more important to the development of a world economy than we usually acknowledge (see Frank 1992 and Adshead 1993), but we also need to be careful in not jumping too far in the opposite direction à la Mackinder's heartland thesis.

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14

Abuses and Uses of World Systems Theory in Archaeology

Andre Gunder Frank

Introduction

Two different, albeit related, questions were posed by the original panel, the chapters, and the discussion: (1) What can archaeology do for world systems theory (WST)? And (2) What can WST do for archaeology? I am only a world system [no hyphen a la Wallerstein's world-system] "theorist" and an increasingly unorthodox one at that, but certainly not an archaeologist. Therefore, I can here offer only an outsiders' bird's-eye overview of the mostly skeptical archaeological digs against WST in these chapters, the volume title notwithstanding. Moreover, as someone who has some acquaintance with the Americas since 1492 but none with any of the several pre-Columbian cases discussed in the chapters, I can only speculate on how, if at all, WST might further their interpretations and analyses beyond those that the authors already offer.

What Can Archaeology Do for World Systems Theory?

Alas, only one contribution was deliberately devoted to addressing the first question in which the emphasis is on what existing and potentially future available archaeological evidence and analysis can do to further WST. That contribution was my own on "The World System in Theory and Praxis" (Frank and Gills 1999). It has been withdrawn from this published collection precisely because the question it posed and the tentatively proposed answers it offered turned out to be altogether outside the concerns of the remainder of the chapters. These were almost entirely devoted to the second question of what WST can—and cannot—do for archaeologists and the advance or reinterpretation of their archaeological research and explanation or understanding. Only two other chapters briefly touch on the first question: In his chapter on the Inca Empire, Kuznar (p. 234) cites and echoes the call of Chase-Dunn and Hall (1991) for the

examination of empirical cases to test world systems theory hypotheses. He correctly observes that his own and LaLone's (1994) description of the Inca Empire helps provide such empirical information, but he does not see it as his task—at least in this chapter—to pursue this problem. Instead, he asks and examines "however, what does world systems theory do for studies of the Inca Empire?" Otherwise, only Hall also touches on the other question when he refers to archaeological and historical evidence that points to different forms and degrees of participation or incorporation in world systems, in which also multiethnic states are the historical norm. Hall also discusses the relation of evolution and world system/s to each other and refers to—but does not specifically cite—archaeological evidence that world systems have their [cyclical?] ups and downs.

My own contribution asked how far we can trace our own world system back through time and how far out it extended in geographical space. The Finley/Polanyi thesis about the alleged nonexistence of long-distance trade and dependencies has been disconfirmed as "untenable" by countless archaeological findings and analysis. It is not only untenable regarding classical Greece and Rome, but also even with regard to much earlier Bronze Age times. That is the case throughout almost all of the "eastern" hemisphere of Afro-Eurasia and, as will appear below, apparently also in the "western" hemisphere. In this regard we need hardly appeal to "the absence of evidence is no evidence of absence," since the evidence dug up by archaeologists all over the world has long since been sufficient to bury the Finley/Polanyi thesis. These same digs contribute "worlds" to WST; and they make WST itself all the more useful to interpret and guide the digs—also on the other side of the world, to which we may now turn.

In this regard, my contribution was substantially based on my "Bronze Age World System Cycles" (Frank 1993) and "World System Cycles, Crises, and Hegemonial Shifts 1700 B.C. to 1700 A.D." (Gills and Frank 1992, also in Frank and Gills 1993). The references to the Middle Bronze Age times in 1700 B.C. and *a fortiori* to third and even fourth millennium Early Bronze Age times necessarily rely on archaeological evidence. My argument in brief is that archaeologists have already dug up enough evidence to suggest that long cyclical ups and downs can be tentatively identified and dated back through at least the third millennium B.C., and that their rhythms are nearly simultaneous over most of Afro-Eurasia. Therefore, I argue, these archaeological finds offer prima facie evidence for the early formation and development of this world system, which already in the third millennium B.C. encompassed most areas from the Mediterranean to the Pacific both south and north of the mountain ranges that span Asia from east to west.

Within this world system framework, archaeological evidence of the "decline and fall" of empires is interpreted as manifestations of downward "B" phases in a world system-wide long cycle. Although I argue that we can identify and date many such cycles and phases in Afro-Eurasia history and prehistory, three of them stand out particularly: One was after 1700 B.C. when there were major population movements—or invasions with benefit of newly invented horse-drawn chariots—from "nomadic" Central/ Inner Asia to South- and West- Asia and Europe. The most remarkable one was the "Dark Ages" from 1200 to 1000 B.C. which engulfed most parts of Afro-Eurasia as one after another empire and civilization literally bit the dust. A third example is first the near simultaneous rise from 200 B.C. to A.D. 200, and the also near simultaneous crisis and decline from A.D. 200 to A.D. 500 of Han China, Kushan India, Parthian Persia, Axum East Africa, and Imperial Rome, not to mention Central Asia and the other regions connecting them in between. Again, the archaeological evidence of apparently simultaneous, and indeed coordinated, ups and downs in population, production, urbanization, trade, empire and "civilization" from widely dispersed regions across Afro-Eurasia is evidence of world systemic connections among them.

Independently of each other, three sets of scholars tested and substantially confirmed each phase from 1700 B.C. to A.D. 1450 on the basis of increases and decreases of city sizes. Some periods and dating that were most borne out and/or confirmed by these data and tests will be cited in connection with the discussion of some chapters, eg., by Morris, Peregrine, Kardulias and Wells, below. The degrees and kinds of connections, core-periphery or otherwise, is another matter to which the archaeological evidence "speaks" volumes. But that is one of the major questions posed by all the other chapters, which ask instead what WST can do for archaeology.

What Can World System Theory Do for Archaeology?

We can classify the answers under: (1) Much, or indeed everything. [Hall offers us a thick WST stick, which he suitably bends to and embellishes for archaeological use.] (2) Nothing, or never heard of it, or would that I/we had never heard of it. [Stein examines the stick, breaks it in two, indeed three, pieces, and tosses them aside, fortunately without injuring any archaeologist or other innocent bystander.] (3) Well perhaps something, which is more than nothing, but not enough. So, we'll have to modify WST somewhat [Feinman] or substantially, or so much so as to emasculate it and render it virtually meaningless and/or unrecognizable, which is what some other contributors do. First, they whittle away at the WST stick, then shake it at their data; and yet they still lament that their data do not all fall into WS place. So they critique WST for being less

[useful] than what its proponents claim for it. Regrettably, WST is not a magic wand.

Moreover, the founder and high priest of WST, Immanuel Wallerstein, never claimed that his "world-system" theory could be applied to times or "worlds" before or outside the European-based modern capitalist world-system, which form the core of his historical/ empirical and theoretical analysis. On the contrary, Wallerstein insists that there has ever been only this one modern capitalist world system, and that all others have been something else, mostly this or that "world empire." Far from welcoming it, he decries the application of his theory or the structural and functional characteristics of the apple [of his eye] he studies to extraneous oranges here and there. "Hold the Tiller Firm" to his original [primitive?] itinerary, he entitled his recent response to a myriad of [mis]applications, [mis]adaptations, [mis]extensions, emasculations and adulteration of his work. Many others however, including the archaeologists and others in this collection, do not heed the counsels and qualms of Wallerstein's "leadership." Instead, they try to "exchange" received local archaeological dig-in-the-sand and stick[stuck?]-in-the-mud ways through the "production" and "diffusion" of new varieties of WST.

That is the counsel by Hall, whom we can classify in the first, that is most pro-WST category above. He offers many good guides to how WST can actually be used by and can help archaeologists in their work. Hall himself summarizes them on his first page: (1) Modern WST must be modified extensively. (2) The systemic range increases and its boundaries expand for different exchange networks from bulk goods, to political/military interaction, to prestige goods, to information/cultural flows [which McNeill (1993,1995) has recommended as the most important world systemic activity to be studied, and which anthropologists, certainly linguists and even archaeologists should have and use to their comparative advantage!]. (3) The systems pulsate with expansion and contraction. (4) Pulsation changes the relative positions of polities within the system [but not necessarily the system itself]. (5) System expansion transforms social relations in the newly incorporated areas [but pulsation can also transform them in the old ones]. (6) These cycles combine with demographic and epidemiological [but also climatological and ecological] processes to shape evolution. A number of these points appear and reappear in the chapters, and maybe all of them should be incorporated into each case-study chapter, or at least in their combination in this collection.

That is not the position of Gil Stein, who places himself rather at the other extreme and stands firmly in the second camp: He would have us all just as well —indeed better—dump most all WST and leave it by the wayside in "Rethinking

World-Systems: Diasporas in the Dynamics of Interregional Interaction" to cite a combination of his title and subtitles. That is, WST is of virtually no use for archaeology, indeed it leads us down the garden path even after it is modified so much as to leave "little more than a shorthand for 'interregional interaction system'." Stein claims that for the study of such interaction, his own "Distance-Parity Model" (Stein 1993), combined with the "Trade-Diaspora Model" of Cohen (1969, 1971) and Curtin (1984) can do the same thing as WST, only much better! But not so fast, please!

The expert contributors already spend enough time whittling and shaking the WST stick [and Stein breaks and discards it entirely]. I therefore see my task here to defend and extend/apply WST as far as possible within the confines of the archaeological problematiques posed by these various authors. That means the following: (1) First, identify and call straw men what they are: put-up jobs that are easy targets for critiques which would bounce off the real thing. (2) Where possible, display, modify or even build a better world system mousetrap than those in the third, that is, adaptor, camp. They put it to sometimes good and to sometimes questionable use [Stein, of course, puts the WST mousetrap down altogether]. (3) Use that WST mousetrap if I can to catch more, bigger and better archaeological mice with their own data than the authors themselves do. Where and when my own ignorance does not permit me to do all that, I intend to suggest instead how such a WST mousetrap could potentially be used on the archaeological record to extend it and to expand and/or improve its interpretation in the particular cases under review by the authors in their chapters—and now here by myself in this commentary.

We may begin with the first-mentioned task, identifying some straw men. Alas, the chapters have left the field strewn with them. Whichever author does not like a particular alleged part of WST, or none of it like Stein, sets it up as a straw man and then demolishes it with "that's not the way it was/is" in my dig, backyard, or other local or regional "field" of interest. Too bad!

Stein wants to throw the baby out with the WST bathwater, indeed with the entire bathtub, and tear out the plumbing to replace it with his own to boot. He alleges that WST is a procrustean bed that overemphasizes the role of "external" [to what?] dynamics and whose economic determinism denies all possible agency and especially the role of culture and ideology, to the periphery. He writes, "In assigning to interregional interaction the decisive transformative role, the world-systems model ignores the less visible, but, in the long run, far more important [domestic] endogenous changes" (p. 157).

Stein, citing Adams (1974, 1978) and Flannery (1972) in support, also remarks on a correlation [causation?] between complexity of a society and its instability.

Quite so. At a previous panel on archaeology and environment on which I was discussant at the same AAA meetings, Payson Sheets gave a paper under the evocative title "The Bigger They Are, The Harder They Fall: The Effects of Explosive Volcanism on Societies in Middle America." He argued that compared to simpler tribal groups, the more complex the "society," the more was [is?] it at risk of decline and fall when its lifeline or sustenance is broken by natural and/or social events beyond its control. A number of other papers at the same panel on environmental crises made essentially the same argument, only less explicitly.

However, the significant factor here is not so much the "sociopolitical organization" per se which forms the fourth factor in Stein's supposedly better alternative theoretical approach. That is not so, or at least it is not so simple. For complexity of social organization is also correlated—to say the least!—with economic, political, social, and cultural participation in a wider world-system and *a fortiori* in the world system. And when there are troubles in the latter, the tendency is to divide into smaller polities, each of which involutes. Kristiansen [who also appeals to WST (1991, 1994, 1998)] and other archaeologists observed the same in the Central European Hallstatt area in the first millennium B.C. So the process of disintegration that, as we will observe below, Wells found in Roman times had also taken place in this same region already a millennium earlier, and apparently for similar [world] systemic reasons. Therefore, Stein is doing us a dis-service by asking us to look more endogenously inward and less "exogenously" outward. For the real problem is that we have not looked far enough afield to find all relevant world systemic factors and even causes of local or regional events.

Similarly, it makes no sense for Stein to claim that trade diasporas are "best understood by looking at internal dynamics . . . within the so called 'peripheral' areas" (pp. 166-167). Instead, we must regard them as an integral [structural?] functional elements of the world economy/system and its operation of which they are but a manifestation and without which world economy/system they would have no raison d'etre. Wells' independent operators beyond the Roman frontier could be examined as functional analogues if not equivalents of such "external" diaspora; but of course they are and function as part and parcel of the same [world] system, which we must analyze to make any sense of them.

But let us examine Stein's own first example, which he offers as proof positive of the uselessness, indeed contrariness of WST. As a tool in Stein's hands, that is admittedly so, but that is no reason for all of us to discard the tool.

WST can account for the Chinese and Hawaiian responses he cites, which is at least as explanatory as his own. Indeed, WST can do even better; because it can account for a lot more besides, which the more localist or regional analyses leave

not- or mis- understood. It is not so much Chinese and Hawaiian ideology or cultural taste, and much less endogenous domestic changes, which account for what Stein describes. It is their common incorporation, participation, place and role [or function?] in the world system that accounts for the domestic changes—at Stein's ethnographic present, China had been part and parcel of the world system for millennia. Stein remarks that after three centuries of trying, "the European core was unable to dominate its trading partner" in China. Indeed not! And why not? Precisely because [Wallerstein and company notwithstanding] the core of the world system was not in Europe, but in China! It was China that for those three centuries and more was the world's richest, most productive, and most competitive region in the world, as Adam Smith (1937) still recognized and remarked in 1776. That is why it had a consistently favorable balance of trade and was the "sink" which attracted perhaps half of the world's silver to pay for Chinese exports (Frank 1998). No wonder that the then still very marginal, indeed peripheral, Europeans were unable to "dominate" China, quite apart from any "cultural" or "ideological" differences.

Just the contrary for the Hawaiians of course. They also had cultural and ideological differences but nonetheless were easy prey for the Europeans and Americans when their still expanding world system incorporated Hawaii. Nonetheless, even Hawaiians did—and still do today—have recourse to "agency" to defend themselves and their culture as best they can, which alas is not much. So it is precisely the "interregional interaction" in the world system which is the most explanatory factor, and not the "indigenous ideology" or culture, to which Stein appeals.

Let us examine an analogous case posed by Shutes for Irish and Greek farmers. He asks "how can macro-level [WS] theories about social change help ethnographers [and archaeologists] to make broader comparative sense of the changes they observe and analyze at the micro-level? How, in other words, can the ethnographer safely 'study-up'?" (p. 25). Answer: he can not do so by looking for a golden middle local or regional compromise [as we will also see others attempting] between macro- and micro-levels. For the differences between Irish and Greek agricultural productive decisions are not so much due to their respective national or local "appropriate social [let alone cultural] rules" as they are to their respective agricultures' and economies' place and function in the European, and it in the world, economy/system. It is their inherited differential structural place in the world system that generates the different interests, and therefore also determines the productive and political responses of the Irish and Greek farmers.

The point is precisely that participation in the same [world] system can generate different effects in different parts of that system, because these different parts occupy different places and play different roles [have different functions?] in this same unequal structure of the [world] system. That, of course, is one of the first [object] lessons of WST. A second and related one is that it is the unequal structure and the uneven [cyclical?] dynamic of the [world] system itself that generates change [evolution?] in the system as a whole. It does so also through different new challenges for and responses from its constituent parts, as Hall warns. Therefore, since the whole is more than the sum or its parts, we cannot satisfactorily account for events—let alone the responses—in any constituent part without reference to how other parts and the whole [system] itself impinge on it. That is why—and how!—Stein's charge is unfounded that WST, not to mention the really existing world system, does not admit of peripheral/part agency. For the same reason, Stein's counsel to follow Merton into middle-range theory is ill advised, if it means abandoning rather than complementing the more comprehensive [WS] theory with more precise middle-range theory. That observation will recur again and again with regard to various other chapters below.

Kardulias witnesses the very same world system [theory?] structure and dynamic in the Bronze Age Aegean—but, alas, he doesn't quite see it. He usefully distinguishes between internal island-wide, intermediate Aegean regional, and long-distance relations and influences. The latter are with and come from "societies outside the Aegean area, including the Near East, the Anatolian interior, and Egypt" (p. 187). But what is the [world] "system" to which Kardulias refers? Well, at different times he refers to each of the three: local, Aegean and wider ones. He not only subtitles each as a [different?] "system" on succeeding pages (188, 190). He also discusses and tries to analyze events here and there as systemically related to each of these "systems" as though they were of the same or at least analogous significance. Kardulias cannot defend his [unsatisfactory] use of WST by also noting that "I investigate the Aegean BA trade network as just such an interdependent part of a larger world-system" (p. 183) and saying that, "In WST terms, this was core-core interaction" (p.187). . . . with "Near Eastern civilizations and peripheral zones" (p.191).

So how could [should?] better use of WST help Kardulias strengthened and/or extended his analysis? He could devote more effort to locating just what or where his system is, rather than indifferently analyzing events at three different "systemic" levels. It is not just a change in terminology to treat these as subsystems that nest within each other like Russian dolls. Moreover Kardulias could and should carry his systemic analysis farther; but since he does not, I will

try to do so for him: He says that an Aegean-Egyptian connection is well established, and then notes but does not analyze "key exchange . . . with more distant members of the world system (e.g., Egypt, Anatolia, Syria)"(p. 195). [His parentheses and e.g.!] That is, just from where the effects on the Aegean he is researching emanate so far appears to him as no more than a merely parenthetical for instance. Of course, it will not do just to change the parenthetical notation. No, an [the?] additional [world system] question is exactly how far the systemic effects extended, what they were, and how they operated. That is where WST could lend Kardulias a hand, if only he would use it. He can surely do better than just to note that there was a "conflagration that destroyed the palace ca. 1200 B.C." (p. 193) and to mention in passing that "according to Frank (1993), [a system-wide crisis] pervaded the entire Near East and neighboring areas like the Aegean. Frank also discusses the cyclical expansion . . . 1400-1200 B.C., which coincides with the Late BA in the Aegean and will be the focus of much of the discussion below" (p. 187).

Alas, Kardulias' never does discuss this 1400-1200 expansion, and he does not, but should, take account of the 1200-1000 "Dark Age" Crisis when the palace was destroyed. Kardulias also could [should?] inquire just what other "neighboring areas" like the Aegean were involved and also affected—even if his main focus remains on the Aegean. According to the Frank (1993) he cites, these "neighboring areas" extended through the eastern end of Siberia! So perhaps the world systemic influences on the Aegean extend rather further out than even his Anatolian-Egyptian-Near Eastern connections. [Not incidentally, "near east" is a Eurocentric denomination, which should be replaced by "West Asia" at the very least!].

Ian Morris deals with the same area and period and in a way that seems less organized and in part therefore more contradictory than need be. He begins by saying that he wants to concentrate on a small area in the Aegean for two good practical and heuristic reasons: That is what he is working on, and small-scale studies are good and necessary for grand theory. Yes indeed. As a mere "grand" WST theorist, I welcome and use all the "small-scale" data I can get and use. However, I am not persuaded by the other reasons Morris gives for his choice: "third, the grand sweep doesn't pay enough attention to the way knowledgeable actors construct core-periphery relations." What is this "knowledge" he attributes to the actors? What generates the knowledge of conditions that these actors have and act upon? What is it that according to Morris the "grand sweep" is so inadequate for? [Fortunately he does not say "theory," since theory does nothing, but the sweep of history and events do!].

The first one to appeal to the "grand sweep" is Morris himself. He may be doing a "small-scale study," but the first thing he does is place it in the "grand" sweep of time and place that impinged on it. Good for him! Like Kardulias, Morris also makes note of the generalized "Dark Age" that grandly swept all before it from 1200 to 1000 B.C. That precedes but still influences the period he wants to deal with. Alas, it is less than clear just what that period is. He mentions dates that include 1100, 1050, 1025, 1000, 925, 900, 850, 825, 800, and in reference to Hesiod's poetic account 700. Moreover, Morris goes back and forth through this longish period. It might be helpful to his analysis, and certainly to my WST, if he could organize his material or its presentation a bit more chronologically.

Under the circumstances what I read out of [or into?] the data he presents is the following: There was a dark age from 1200 to 1000, in which not surprisingly he finds that "population again fell, political centralization disintegrated, and many advanced crafts disappeared" over a large area (p. 71). Well, that is what we mean by "dark age" in a "B" phase of "my" long cycle (Frank 1993). So it is also not surprising to find reference to "an enclosed, isolated present" and "a revolution in ritual and mythology in central Greece" (p. 74). Morris writes "I would suggest, the central Greeks stabilized a new system of power relations around 1000 B.C.," trade expanded, and "Greece was being drawn into a Mediteranean economic system," so that Near Eastern imports begin to appear in digs at Athens and Argos (p. 75). "But between 825 and 800 this trend was reversed, and by the early eighth century graves are generally poorer and simpler than at any time since the tenth century" (p. 77). I can only be thankful for this "small-scale" evidence in support of the dating of my theory about the "grand sweep." For there I found an expansive "A" phase of expansion from 1000 to 800 B.C., followed by another long "B" crisis phase after that (Frank 1993).

Morris goes on to observe that after 800, "Aegean, Greek horizons were widening, not contracting" and they "had renegotiated their peripherality to the Levant" (p. 77). One of the "CA treatment" objections to my characterization of the post-800 B.C. period as a "B" phase was that during this very period the Phoenicians expanded westward across the Mediterranean. My published "Reply" was in part that "might it not have been precisely the emergence of economic crisis after 800 B.C. that generated Phoenician exploration and new colonies in the Mediterranean" (Frank 1993:419). Ditto for some of Morris' Greeks! So, far from the "grand sweep" not paying enough attention to the way knowledgable actors [react!] in their coreperiphery relations; it seems rather that it was the "grand sweep" that gave them both the reason and the knowledge to do so.

So there may indeed be Morris' "small scale" and Kardulias' "multiple levels" of local internal, regional intermediate, and "grand sweep" of the world system. The question is: how are these different scale "sweeps" related? It is all very well to study-up from one's own dig, but if the archaeologist does not take due account of the whole [world] system of which "his/her" site was a constituent member, then s/he will not know what w/hole in the world [system] s/he was digging, nor where to look to dig the next time!

That is Wells' problem with his findings in the Roman Empire. He asks, "what does the word 'Roman' actually mean in this context . . . Who exactly is the Empire?" (his emphasis, pp. 94, 96). Indeed! What does any "'imperial'," "societal," not to mention local or regional designation actually mean? Wells shows that the Roman occupying armies were dependent for many of their supplies on independent producers, that is producers who were independent of Roman military and administrative power beyond the "frontier." Yet Roman economic demand generated supplies from them, which were adapted to Roman needs and tastes—and the latter also adapted to the various local ecological possibilities and preexisting cultural tastes. Structurally—and "functionally"!—the areas beyond Wells' frontier were certainly part of the same "system," whose function we would miss if we treated them only as functional equivalents of Stein's or Curtin's outlying "diaspora." So how far did "Rome" extend? The Byzantine area—well beyond Wells' temperate Europe—was part, indeed the most productive part, of "Rome." Pirenne argued that after the fall of the "Roman Empire" [whatever exactly that was and how much of it "fell"] there would have been no Charlemagne without Mohammed—or indeed Byzantium.

And Oh, Mr. Gibbon, just why did Rome decline and fall, and did Byzantium fall with it? Was it just historical accident that Imperial Rome fell [in the European west and northeast where Wells is looking] at just the same time that Han China, and other empires and non-empires in between also declined and fell? Teggart (1939) wrote about "correlations" in the historical events in Rome and China. However, he really demonstrated connections between them, of which there are still archaeological traces in the decline of the Central Asian cities that did connect China with Rome—as part of a single world system! (Frank and Gills 1993; Gills and Frank 1992).

Peregrine addresses the same problematique at the beginning of his paper-before seeking to escape from it into the ideology of Habermas, which is certainly more anti-WST than just "non-WST." [I happen to have personal experience of the destruction and closure of an entire institute by Habermas just to spite some of his and my colleagues because he did not like their WS theory and praxis]. To set the stage for Peregrine's appeal to the "non-WST" of Habermas, Peregrine first

sets up another straw man: World-systems analyses should "equally weigh rise and collapse, centralization and decentralization, growth and decline, viewing them as alternate outcomes of a singular [sic] process of world-system operation, rather than as polar opposites. . . . [yet] Despite this, world-systems analyses have rarely focused on collapse" (p. 37). Well, yes and no, or rather yes and yes. Yes, WST should do as Peregrine says [but not as he himself does, as we will see!]. And no, it is not true that practitioners of WST do not focus on collapse; for yes they do as the discussion above already shows and that below will show as well.

Then, Peregrine holds Tainter (1988) up as an example of such WS analysis, only to say, no that's the wrong way to do it. Well, yes, I agree that Tainter's is the wrong, or at least insufficient, way to study collapse; but not because he does WS analysis, which Tainter does not, but precisely because he does *not* use WST! Peregrine says that a perusal of Tainter's summary of others' explanation of collapse implicitly ascribes them to environmental degradation. Well, some do; but more significantly all, including Tainter's own composite alternative theory, ascribe all other explanations to causes that are almost entirely "internal" to the social unit [empire, etc.] under consideration. The only exceptions are unexplained deus ex machina invasions from abroad, like Gibbon's barbarians. The trouble with all the "explanations" Tainter reviews, including his own, is that they do not take any account of any structure, dynamic or even the possible existence of a world system. Imperial Rome and Han China each decline for its own reasons [plus a bit of a push from Gibbon's "barbarians"]. No connection with anything or anywhere else, world systemic or otherwise, is even contemplated. However, that is not the shortcoming of these [non-WST] explanations that disturbs Peregrine. No, he does not like their link to ecologically influenced "crisis in the subsistence economy," because Peregrine "suggest[s] collapse is equally likely to stem from a crisis in social reproduction" (p. 37). And that is where he brings in the myopic Habermas, who can only steer us into the wrong direction, since contrary to Peregrine the real problem is that WS theorists and others take far less account of ecology than they should!

Still, even without that, world system analysis can and does address the "decline and fall" question from a much broader Afro-Eurasia wide perspective than Peregrine, [it would be better!] not to mention Habermas. The "world system cycle" posited by Gills and Frank (1992) [and also see Frank and Gills 1993 and Frank 1993) notes the near simultaneous fall of the Chinese Han, Indian Kushan, Persian Parthian, and a bit later East African Axum empires—and economies—as well in a "B" phase decline from A.D. 200 to A.D. 500. "However, the eastern Byzantine part of the Roman Empire never suffered such a severe collapse as its

western European part" (Frank and Gills 1993:171). Gregory (1994) confirms both propositions, neither of which fall prey to the critiques of Tainter.

What Peregrine takes from Habermas is a trinity of economic, sociocultural, and political "systems" that are "tightly interdependent," so much so, that it seems dubious to call them "three systems" or even one "system." Habermas has one set of names for them and Peregrine another, but no matter, as they seem more like the very same three factors, dimensions or sets of relations we can find in any book. Nor does Peregrine seem to get much mileage out of this trinity. For the South Pacific Tonga, it only "helps" him observe that long-distance trade brought prestige goods which helped legitimate political power, which in turn is under threat from any interruption of this trade supply. That seems like no more than what can be observed with the naked eye [not to mention without Habermas] in zillions of "societies" around the world.

Peregrine's other case study, Mississippian Moundville, also had far-flung trade relations with Florida and the Great Plains; and its elite also traded prestige goods [no thanks to Habermas] as well as other goods. We do not know why Moundville collapsed [alas Habermas cannot help us], but there is no evidence of prior environmental catastrophe or population decline. Less prestige goods have been dug up, though it is less clear whether this was cause or effect or both. There is also evidence of the population's division and/or displacement into a number of smaller political entities. That is, of course, the usual pattern in world-system decline [and contra Stein] is largely independent of their particular political forms.

That is the case all the more so in a cyclical B phase of the world system as a whole. We know this because, contrary to Peregrine's claim that we overlook such collapse and/or decline, it has been observed and analyzed quite frequently by world system as well as other analysts, for instance of interminable instances in West Asia. In Central Asia, tribal consolidation and division on the Inner Asian Frontier of China has been the staff of their life as a function of their trade and other relations with the economy and polity of China. These were observed in studies pioneered by Owen Lattimore and were recently pursued by the anthropologist Tom Barfield (1989) and myself (Frank 1992). The same is also the subject matter of other chapters in this collection, as we will observe below.

So what is the extent of Peregrine's system? Beyond Moundville, he mentions its contemporary Cahokia, which of course also had some far flung contacts. I don't know what hand Habermas might lend him there, since he does not say. However, the WST he disdained instead could lend him a hand to explore if and how his Moundville and Cahokia were related, and/or how either or both participated in a still larger world system, and how that may have impinged on

their individual or mutual decline. After all, Alice Kehoe and others claim to see evidence of what may have been a much larger still "world-system" in which the Mississippi, Southwest, and Mesoamericans all participated jointly. Cahokia is the topic of the next paper and Mesoamerica of still others.

The Cahokia experience is examined by Jeske. Among other things, he contradicts Peregrine—and rightly so—when he states that "core decline and peripheral ascendance is expected in WST" (p. 216). However, he also reviews Peregrine's (1992) own examination of Mississippian societies, including Cahokia, and observes that Peregrine cannot find sufficient evidence to meet Stein's (1993) [rather stringent] three criteria. [Is that why Peregrine now seeks an escape to Habermas?]. "What does that leave us?" asks Jeske. Not much, but perhaps it is because Peregrine and he try too much to fit their data onto Stein's procrustean version of a supposedly minimalist WST bed. Why don't Peregrine and Jeske instead try to look for "correlations" [Teggart's (1939) term], not to mention connections, let alone any possible world-system structure and dynamic?

The real object lesson is not so much the [unwarranted and perhaps wrong] one of these three authors that WST is worse than useless for their purposes. For their data don't fit their preconceived model—to use Stein's terminology—which they derive from what they suppose WST has to offer. All of us, including this trio, might get a lot further if instead we examined our available data more inductively with the help of any and all "theory" or theoretical/analytical tools at hand. That includes especially the WST "perspective" [a term that signifies a demotion by Stein and a promotion for Hall]. It could first expand the horizons of our inquiry and then guide our search for additional data and/or inferences from the ones we already have, without trying to fit them onto a procrustean bed. That is not what WST is, or need be restricted to, any more than Marxian, Weberian, Darwinian, or probably any other "theory." Easier said than done, perhaps, especially for a literally ignorant outsider like me. However, it is much easier and would be more useful for trained and competent archaeologists to do so, if they only would. Precisely that is what I challenged them to do in and with my "Bronze Age World System Cycles" (Frank 1993), which however is about the "old" world and not the "new" one. Is an analogous challenge in the offing also for the latter? Let's turn to look at South and Mesoamerica.

I cannot but agree with Feinman when he ponders whether it really makes sense to decide "unilaterally" [ex-ante?] what analytical or organizational [world-system?] scale to privilege. Rather we should proceed more [inductively] to regard that as an empirical issue, which depends on the problem at hand and the context in which it is to be analyzed. Now we are at least potentially armed with both empirical precedent and theoretical guides [perspectives?] about wider and

more complex world-systems or indeed the world system, which affect the experience and interpretation of "local" evidence elsewhere. Therefore, it seems prudent at least to be open to the eventuality that any site, dig and/or other data at hand may also be part of and influenced by its participation in such a wider "system." The fact that most archaeologists can only dig here and now, at least at any one time, is not sufficient reason to justify their "intuitive biases . . . to focus more locally" (Feinman, p. 54).

It is all to the good to focus on one's [local] data, but not to the exclusion of whatever the [world-system?] context that may have given rise to it. That wider context may also have accompanied, influenced or even determined the development of, and contributed to the eventual "decline and fall" of the site in question. The debate over whether trade in prestige goods was or was not germane is more of a side show, since in each case it is really more a question to be empirically examined as far as the artifacts and their analysis permits than a principle to be debated in theory. Again, however, what we have learned elsewhere can be a useful guide—not a procrustean bed—to our analysis here.

In passing, I am also wont to add my assent to Feinman's skepticism about placing [too] much weight on ethnicity. Too many well done ethnographic studies of contemporary and historic times have shown how circumstantial and not essentialist ethnic identity is here and there, now and then. Therefore, we should also not lend "too much weight" to ethnicity in prehistoric ones. Moreover, Hall warns that most large polities, not to mention world systems, have always been multiethnic. Alas, that lesson also seems largely to contradict Stein's "intuitive bias" and/or at least his ill-advised counsel to look "inward"—to what?

Once again, as already observed more than once above, Feinman also remarks on how decline led to balkanization, in this case at Monte Albán. And why not? Moreover, competition emerged among the smaller successor polities, even if they probably also were more locally involuted and inward-looking. There is no necessary contradiction, especially if the preceding/accompanying decline was caused by or resulted in a diminished resource and economic base in a smaller pie. More threatened and/or diminished access to slices of a smaller pie "naturally" increases and sharpens competitive conflict about how to share what is left. Alas this conflict over shares of the pie may itself also reduce the resource size of the pie and/or some or all of the claimants' ability to utilize it productively still further. The resultant warfare, destruction or neglect of irrigation systems, impaired social capital, etc., can impair the resource base and economy still further. [A contemporary example is the former Yugoslavia and Bosnia, where world economic crisis and its repercussions in the national debt crisis and local

poverty first generated the breakup and civil war, which in turn further aggravated the impoverishment of the land, economy, society and people.]

Of course, contra Peregrine, all this is part and parcel of the structure and function of most or all real world-system/s and of any sensible analysis of the same. So Feinman does well to look for world-systemic connections between what happened in and around Monte Albán, and also to note explicitly that even the smaller successor polities were still part of the same world system. But what was this world system, that is, what was and was not part of it? "The Classic-Postclassic transition in Oaxaca [including Monte Albán] was part of broader macroscale processes that were initiated by the fall of major Classic period urban centers such as Teotihuacan, Monte Albán, and the cities of the Mayan Petén between A.D. 700-900" (p. 57). And how much more? That is an empirical [world-system] question, that I am in a position to ask, but alas not to answer. Perhaps Hall has information or intelligence from the [US] Southwest, or Peregrine and Jeske from the Mississippi. If Jeske's Cahokia or Peregrine's Moundville prospered just after regions to the south declined, that is not evidence for the absence of any possible [world-systemic] connections. Hall has emphasized time and again how marginal marcher-states rise beyond the smoldering ashes of a declining or fallen core. Let them, and of course also Feinman, look for evidence if any, or dismiss the question altogether if they dare.

Returning to Feinman, he pleads for a "multiscalar" approach that combines rather than plays off differing theoretical perspectives and analytical tools. Well and good, but not because "the macro-scale approach leaves important aspects ... unexplained" (p. 57). Of course, a telescopic macro-approach cannot distinguish, let alone "explain" every item dug up at a particular site. But neither can the most micro-level approach! Indeed, even less so, since the more micro [scopic] view can perhaps reveal the inner composition of the artifact or site, but it cannot afford the equally necessary and perhaps even more explanatory contextual telescopic overview of the more macro-approach-as Feinman himself just pointed out from the vantage point of his own telescope. But how far further out to carry this macro-systemic telescope and to examine which problematique? Mesoamerica? South America? Europe? Asia? Three other chapters, dealing with both the same and other time periods, allow us to pose these questions, if not yet to answer them.

Schortman and Urban make a polite bow to WST in their analysis of the Naco Valley in southeast Mesoamerica. But they limit their "use" of WST to its sometime identification of exploitative economic core-periphery relations, for which they cannot find any evidence in their case. So they find WST of little or no use to themselves. Too bad, for it may be of some use to us to account for

some of their findings. They do well to depart from their initial concern with power relations on the local level alone and to consider that they may indeed also be related to regional and interregional relations, whether "core-periphery" or not. They even do well to recognize that there may be several regional "cores" each of which has its own "periphery," but they do not do well to regard that as incompatible with WST.

Schortman and Urban seem to find some evidence also for "ideological coreperiphery relations." However, they cannot account for them except by noting that imported ideology may be useful to legitimize local power relations. For they find no evidence for any military or economic counterparts or quid pro quo for this transfer of ideology. They did look for and at economic relations, but perhaps not enough. Moreover, despite Schortman and Urban's interest in these relations of interchange, they seem far less interesting than the ones they neglect.

Schortman and Urban take my name in vain, literally. They (p. 131) cite [only] Frank (1993) in support of the proposition that "evidence of interlinked trajectories is commonly taken as symptomatic of common participation in a single world-system." In the next sentence they cite themselves [1988] for evidence of "persistent contact among participants in this interaction network" across at least all of southeast Mesoamerica. That is it, and no more. Only at the end of their ethnographic account and again in the concluding paragraph of their paper about the uselessness of WST do they note the dominant ideology's

> ultimate failure at the end of the Late Classic. . . . [which] may have been precipitated by disintegration of centralized elite power at Copan in the early ninth century A.D.. . . [after] southeastern Mesoamerican cores began to disappear from the network, reducing the flow of crucial ideological and material resources on which elite preeminence was based. . . . [which was followed by] consequent political decentralization in Naco, occurring from A.D. 950-1100 (pp. 137, 140).

We may return to the question about the extent of the world system that I posed to Feinman above *and* to the evidence supplied by Feinman about "macro-scale processes initiated by the fall of Classic period urban centers" from Teotihuacan in the north, Oaxaca to the south, and the Peten to the east. Curiously, it refers to this same period of disintegration and decentralization observed by Schortman and Urban in the Naco Valley. So why do they fail to regard their southeast Mesoamerican *and* this wider evidence as "symptomatic of common participation in a single world system"? They seem not only to take my name in vain but to

have read WST in vain, or they would use the empirical knowledge they have and/or is available to them [but alas not so to me] to explore these possible systemic connections and their bearing on their own and others' findings.

Alexander examines a later period in parts of Spanish colonial Mesoamerica. Alas the evidence she brings, and even part of her own analysis, demonstrate just the opposite of her dismissal of WST, which she caricatures as little more than some hastily assembled straw men. Indeed, Alexander's charge that WST "models are difficult to apply to prehistoric macroregional networks because they do not specify how the world-system affects processes of political-economic expansion, centralization, or segmentation, and variability in core-periphery relations generally lacks archaeological correlates" (p. 103) is not even a red herring straw man. It is simply counter-factual and hardly worth rejecting. So why bother at all? Well, because Alexander herself demonstrates that it is a red herring. Why would she do that? Because she is herself writing good WST prose, apparently without being aware of it. Perhaps that is because she also fails to understand the WST that others—alas including myself—have written even when she cites them.

It is complete balderdash for Alexander to claim that "Wallerstein (1984), misconstrue[s] the complexity of the relations of production in both prehistoric and modern contexts" (p. 104). To begin with, Wallerstein et al. did not even refer to prehistoric times, and it is Alexander herself who misconstrues what he/they have to say about [early] modern ones. Wallerstein's rendition of the modern world-system says that its structure and function tends to generate and modify a world-systemic structural division of labor and mix of relations of production. Wallerstein and other world-system theorists never, to my knowledge, directed their telescope specifically at Mopila, Cetelac, and Cacalchen. So how can they be accused of having misconstrued or oversimplified this local complexity?

However, we WSTheorists and others are in debt to Alexander for the interesting empirical work and good WS analysis of this local data that she does for us! For she demonstrates the value of WST even for this microanalysis, even of political, economic and social structure at the local level and therefore de facto contradicts Alexander and others in the collection who deny that such is possible. Alexander's appeal to supposedly extraneous explanatory factors is quite superfluous. Instead, thanks to her, we can now see just how the community integration, participation, and role or "function" in the structure of the world system first generated and can now account for the different relations of production, and indeed specialization and diversification among different products that she details.

Alexander can and does show very well how local ecological differences and productive roles in the local [and indirectly, regional- and world-] economy determine local choices in production, consumption and housing/lot size. She shows how that happens through self-interested risk-aversion and doing-the-best-you-can under the miserable circumstances imposed by differential place and participation in the local and world system. These differential circumstances presumably include better land and water for the Cetelac *hacienda* and more production for the market than in the poorer and more populated Mopila *pueblo* and Cacalchen *ranchos,* which suffer from more "land stress." Far from demonstrating "variation from what would be predicted following the world-systems model" (p. 108) the role of the large cattle estates "demonstrate" the same insofar as they [also] served as collateral for loan capital used by their owners in other commercial enterprises. That has been—and still is—par for the course wherever that is in the landowners profit maximization interest. So as Alexander denies but herself shows, WST predicts and explains [re]actions in all three [types of] settlements and localities as a function of their respective but different places and roles in the world [economy and system].

For any sensible world system perspective and analysis would predict that in far-off Yucatan a not very profitable *hacienda* underwent incomplete market transformation (p. 107), did not displace indigenous communities as rural social units, and did leave them considerable household autonomy (p. 118). Of course, the *hacienda* did so only after taking much of the best land from the indigenous population and left them their labor only as long as it was not needed—for the local participation in the world economy/system. Of course, Yucatan is not the only case of the "failure" to transform all relations of production in all rural areas, as Alexander unbelievably seems to believe, where and when there was no profit in so doing.

Alas, the same was not true everywhere else as Alexander also shows in her references to Central Mexico. There, *haciendas* were built and operated to supply food and other materials like timber to the urban markets and to the silver mines, which were being opened and worked—by indigenous workers. Regrettably for the Spaniards, God or geology had placed the ores in mountainous areas, which had no indigenous population and were distant from the densely populated fertile valleys. Solution? Move the Indians from here to there. "The expansion of the *hacienda* in Central Mexico in the late sixteenth century has historically been viewed as the organization of production that facilitated world system expansion . . . [which] has been widely regarded as a hallmark of the transition from a 'dual' economy to mercantile capitalism" (Frank 1979:10-11).

I rise to a point of personal privilege. When in 1966 I wrote the book cited but not published in English till 1979, no one thought so, unless perhaps it was Eric Wolf and his Mexican friend Angel Palerm, who had not published the same. My book was a critical attempt to turn the local "institutional" explanation of the "feudal" *hacienda* on its head and to show how that *hacienda* was generated by the structure and cycles in the capitalist world system. One of its main demonstrations was to show when and how the predominant "system" of labor deployment and modes of articulation—to use Alexander's terminology—changed from outright slavery until 1633, to the *encomienda* thereafter till 1648, and then to the *repartimiento* until 1675, and to *hacienda* peonage after that. I demonstrated how each change in the deployment and organization of labor was determined by the Spanish needs for labor and how these in turn were a function of the epidemics engendered by the Spaniards in the indigenous population and of the cyclical expansion and contraction of silver production and economic activity in general, not only in Mexico but in the world economy/system. Just how labor was organized through what relations or mode of production was neither here nor there, so long as the Indians were deployed for and did work! I am gratified to find that my then rather outlandish thesis and work is now widely enough accepted to be termed a historic "hallmark" by Alexander.

That being the case, it shows that the use of WST to analyze Central Mexico in the work cited by Alexander does exactly what Alexander laments WST can and does not do for her data in Yucatán. But of course, it *did* do so for the relatively more isolated Yucatán as well, as we saw above. Alas, no theory works on its own. It also requires a theorist or at least analyst to apply it in his/her analysis of the evidence. That is the job of the theorist. We can be thankful to Alexander for having spoken excellent WST prose, albeit apparently without knowing it. With a bit more self-consciousness, she could do even more with her data and better for us.

In fact and in summary, all of what Alexander discusses and shows only demonstrates the utility—indeed the necessity—for WST. However, it is only a half-truth for her to also claim that "the expansion of the world-system to New Spain can be described as a consequence of Spain's worsening position relative to the rest of Europe" (p. 106). The other more significant part of the [world system] truth is that Columbus' and Cortez' [ad]ventures were a reflection of the unfavorable position of all of Europe in the world economy/system relative to various parts of Asia, and especially to China, which the Europeans sought to reach. And as Stein points out, Europe was unable to subdue China economically or politically for several centuries thereafter. Of course that was not for the "cultural" reasons Stein assigns, but precisely because of Europe's own absolute

weakness relative to that of China and the rest of Asia , as already argued above and in Frank (1995, 1998). [Also it was not so much the "levelling effects of distance" as Stein alleges (p. 163), but the greater economic and political strength of the Levant that defeated the Crusaders, who after all came from the relatively much more backward Europe precisely because of the magnetic attraction of the Levant, which in itself was only a western outpost of the much richer and stronger Asia—which is what any examination of the real world economy/system immediately shows.] And the same must be said about the Spanish [ad]venture of Pizarro to Inca Peru, which was weaker and momentarily in political crisis, to which we may now turn.

Kuznar examines a whole series of "beneficial influence[s] of a world-systems approach for Inca research" (p. 236). Contra some of his colleagues in this volume, he even concedes that WST "may also shed light on the cause of empires, and thereby help to resolve the current debate over the ideological versus material foundations of Andean empires" (p. 236). There is no need here to repeat Kuznar's demonstration of what world systems theory can do for studies of the Inca Empire in his and La Lone's (1994) hands (p. 236). One thing it does not do in Kuznar's hands, however, is to tell us just what the boundaries of the Inca world system were. He claims that "the Inca case provides fairly clear-cut boundaries" (p. 226), but of what? Perhaps of the Empire, if we accept his denominations and identifications of core, semi-periphery including especially the Aymaras in Bolivia, and the peripheries here and there, but not necessarily of the whole "system" of which they were part. [Incidentally, the functional extension of the Inca Empire—not even to mention any "world-system"—also seems to disconfirm the llama-carried limitations of Stein's Distance-Parity model.] Where is the evidence that this or any other major part of Stein's "models" "provides a much clearer view of the dynamics of interaction—specifically, how interregional networks function and change over time" as he claims (p.160) in his comparative rejection of WST?

But where does the Inca Empire/world system end, as Wells asked about the Roman Empire/world system? When Kuznar refers, for instance, to the altercations with the Mapuches in the south of Chile, he suggests that the Empire ended there, because the Mapuches never submitted to the Incas. Well, the Mapuches did not submit to the Spaniards and the Chileans either until they were subdued by settlers, arms, and alcohol in the mid-nineteenth century. That does not mean that they were not "incorporated" in a world system by either the Incas, who perhaps ran out of time, nor the Europeans who battled with them for three centuries. David Wilkinson (1987, 1993) suggests and Hall seems to accept that regular[ized] political conflict—especially over economic resources—between to

"groups" ipso facto puts them in the same "world-system." Wells'—not to mention Feinman's and maybe even Jeske's and Peregrine's—treatment of "boundary" problems shows that it is not so clear just where to draw that boundary. Gills and Frank (1991, 1993) and I (Frank 1993) have proposed a number of operational definitions for empirical establishment of boundaries—but for our world system.

One of Wallerstein's most confusing and least satisfactory categories are his "world empire" vs. "world system." The distinction is not only confusing, but it has already confused quite a few archaeologists, e.g., Greg Woolf (1990) on the Roman Empire/world system, not to mention some in the present collection. My own position all along has been not to use this alleged distinction and that it is best to forget about it altogether. That is not to say that there have been no empires. The issue is which empire/s and what adjoining [non-imperial] areas and peoples were structurally/functionally [with apologies to Radcliffe-Brown et al.] de facto part and parcel of what world system? And what difference did/does it make for our understanding of what happened with any of these empires or other polities [Inca, Rome, China, Cahokia/Moundville, Maya/Oaxaca/Teotihuacan, and possibly others] and between them and [in] their "border" regions/peoples?

What's more, if an outsider may be allowed a couple of [near] closing impertinent questions, were any pre-Colombian South-, Central/Meso-, North-American "indigenous" peoples members of the same world system [and would it make any difference]? Or did they even participate in any way in a round-the-world-embracing world system? Betty Meggers and Alice Kehoe might well wish to answer with a loud YES! If so, did that world "system" have enough coherence and mutual influence between here and there that we would need to take account of it adequately to account for and understand what happened either here or there?

Whatever the right answer may be it certainly is not that of Stein when he concludes that WST sins in "overemphasizing interaction and the global structure of the system, [and] they ignore or minimize the role of internal dynamics in the [part] areas that they call 'peripheries.' Second, world-systems approaches fail to specify . . . power relationships among the different polities within the interregional exchange network" (p. 173). The failure is Stein's, not in WST. Fail also must all those archaeologists who—to their and our peril—ignore or disdain interregional exchange networks out to their farthest [empirically to be investigated] reaches. Moreover, it is not so much ignoring the "internal dynamics" of the part/peripheries that will make us miss the power relationships among, and even within, different polities. It is ignoring the internal dynamic of the whole world system that puts our partial analyses at risk of missing an

essential element of the explanation! Feinman grapples with this problem; while Wells, Kardulias, Peregrine, Jeske, and Alexander seek to elude it. Stein, of course, just outright denies its existence like an ostrich, but that will not make it go away.

Hall, bless him, regards the 5,000 [plus] years of the world system a la Frank and Gills (1993) as giving too short shrift to the at least 10,000 years of the "world system" that Chase-Dunn and he wish to pursue, following in the footsteps of the Lenskis (1966). More power to them, if they can demonstrate systemic connections, through which what happened here cannot be understood without taking account of what then or previously happened there. Ten thousand years may be more than we now have evidence for on the operational definitions proposed and used by Frank and Gills (1993) or Wilkinson (1987) or indeed Chase-Dunn and Hall themselves. But this is really a case where the absence of evidence is no evidence of absence. And if we don't look for any evidence, we are unlikely to find any, or if we find some by accident to understand its potential significance.

Maybe it is a bit too much to ask of WST to guide and bring us to that end, and even more so to the next one to which I allude in conclusion below. However, we can be thankful—instead of resentful, derogatory, and rejecting—that WST has already done as much as it has, also for archaeologists. If they will only take off some of their blinders, WST still has quite a lot more to offer them.

So where should we stop? The late American China historian John King Fairbank (1969) advised that history must be researched, not forward from the middle, but backward from the present as far back as the evidence will take us. *A fortiori* for archaeology and physical anthropology [and linguistics?]. Migration and intermarriage, yes and perhaps armed conflict and/or the spread of disease, and certainly changing climatic and ecological conditions have diffused [no objection to that term!] and mixed up genes, languages, further aspects of material and other culture, indeed "ethnicities" since time literally immemorial. Just helter-skelter? Or was there, and can we detect, some [world] systemic structural characteristics and [evolutionary?] dynamic? Hall suggests as much in his sixth point, and that may add a fifth even more extensive set of world system exchange relations to his previous four. And if we don't proceed in this direction, can we ever understand the human, animal, vegetational, ecological past—and hope to manage it in the future?

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15

Does World-Systems Theory Work?: An Ethnographer's Perspective

Darrell LaLone

Introduction

We may, at last, ask does world-systems theory work? The contributors to our present volume offer a range of positions stretching from the unbridled enthusiasm of Thomas Hall to a majority position of "well, maybe" to a minority of more doubting Thomases. However, the value of a theory is not determined by majority vote, but rather by its usefulness in explanation, its success in prediction (or retrodiction), its fruitfulness in raising new research questions. On these grounds, I would suggest that world-systems theory would be a likely winner even if most of its competitors were not dead horses!

Not the least of its appeal is that world-systems theory allows scholars from a wide variety of disciplines to speak to one another. However, as we become more inclusive we may often find that the increased number of voices may often lead us to speak past one another, and I believe we see some of that in the preceding chapters. One contribution a commentary might make is to underscore opposed views from our chapters, and to emphasize and perhaps respond to the many specific criticisms they direct to world-systems theory. However, I see few specific criticisms that are not quite adequately handled in Thomas Hall's paper. Claims that world-systems theory is simply economistic, that it necessarily implies core dominance over peripheries, that it ignores peripheries or denies them agency and their own dynamics are all debunked in Hall's paper and in the recent world-systems projects that he cites.

Rather than to reiterate responses to the various critiques we find in the chapters, I think my own commentary may be more useful as an attempt to offer some perspective on some of the more general reasons why anthropologists and archaeologists may resist world-systems theory or temper their enthusiasm with some degree of skepticism. Although one part of world-systems theory's appeal is its utility to many disciplines, anthropologists and archaeologists may not share

all the enthusiasms of colleagues applying world-systems theory in history, sociology, or comparative civilization studies. Some of these concerns are also matters of internal dispute within anthropology as well. In broad terms, these issues include debates over appropriate units and levels of analysis, nomothetic as opposed to particularistic approaches, materialist as opposed to "interpretive" approaches, and differences over issues of systems, structures, and agency.

World-Systems Theory and Anthropology

Beginning with the issue of the levels and units of analysis characteristic in world-systems theory, Thomas Hall argues that the domain of world-systems theory begins with "intersocietal interaction." "Societies," "groups," and "cultures" are not tightly bounded and isolated entities, and to concentrate "solely on the constituent members (conventional 'societies') is to miss a good deal of the action, and to fundamentally misunderstand social evolution" (p. 5).

Certainly most contemporary anthropologists would heartily applaud Eric Wolf's critique of the concept of societies or cultures as "a world of sociocultural billiard balls, coursing on a global billiard table" (1982:17). This acclamation does not, however, translate into widespread enthusiasm for the premise that "intersocietal interaction" is the best focus for what we *do* as anthropologists or archaeologists. As *scholars,* we may well become enthusiastic about the promise of such high-level abstractions, but as practicing anthropologists and archaeologists much of our professional work is more deeply grounded. We dig and do *fieldwork,* and that must necessarily be done in very specific places and cannot be done in fields of "intersocietal interaction."

Acknowledging that this may be one source of anthropological critique of world-systems work, Hall notes that the tendency of some social scientists to focus on ethnographic or documentary detail generated a fundamental distrust of perspectives that make general claims.

Although anthropologists appear to have balkanized themselves into a plethora of theoretical factions, many still embrace nomothetic goals. Nonetheless, what remains common experience and practice is precisely a commitment to primary data. We all do fieldwork, even if we are not all primarily ethnographers. Ethnographic approaches (here encompassing archaeology as a form of ethnography of the past) require a command of particularistic data. Extremists in the anthropological camp or among the "Humanist" camp followers may even proclaim that anthropology is ethnography or it is nothing.

However, anthropology has always been more than ethnography, and there is no likelihood that *ethnology* will lose its centrality in anthropological scholarship.

Nonetheless, I do think that world-systems theories will have to meet the challenge of ethnographic, archaeological, and historical particularities.

Many of us have been exploring what world-systems can do for anthropology, but let us also beware the old problem of the hammer (when what you have is a hammer, it seems *everything* needs nailing). But let us turn away from that old saw (to mix metaphors) to ask what anthropology, archaeology, and history can do for world-systems.

For a start, anthropology, and here I mean especially *ethnography,* offers a response to another problem Hall has noted, i.e., that the world-systems perspective is considered too economistic and that it ignores critical dimensions such as culture, gender, and local variation. There is a pressing need to understand "how system-wide processes and dynamics shape local processes and dynamics in transforming, sometimes transmuting, local class, racial/ethnic, and gender relations" (p. 6). Hall cites a growing body of work that begins to correct these shortcomings. Anthropologists, archaeologists, and ethnohistorians are certainly ideally situated to carry forward a non-Euro/core-state-centric research program. And certainly, to give ethnography its due, fieldworkers (including those of decisively materialist persuasion) know that economic forces account at best only *partially* for why the peoples we learn from do what they do. Several chapters in our volume illustrate this point quite well (e.g., Urban and Schortman). Furthermore, ethnography raises questions concerning system, structure, and agency that cannot simply be dismissed as out of scope for world-systems theory.

Differing positions on questions of systems, structure, meaning, and agency within anthropology will shape reactions to world-systems theory. Although I do not believe critics make a plausible case for the claim that world-systems theory (at least in its current form) denies agency to actors in peripheries, world-systems theory is necessarily systemic, it does put structure in the foreground, and it has so far proven largely indifferent to issues of meaning. Without meaning to revive the old materialist/mentalist debate, I would simply observe at this point that anthropology remains divided along a fault line on one side of which many anthropologists seem to center more on (1) issues of adaptation, evolution, ecology, and economy, while others center more on (2) meaning, symbols, and the cultural construction of experience.

Following different emphases, we seem to have aligned ourselves into contending tribes and factions, sometimes ignoring one another, and sometimes trying to shout one another down. Some see this as the apocalyptic struggle for anthropology's soul and future, while others might regard it as little more than the combat of different grasshoppers from different fields.

Nonetheless, small matters, as Aristotle observed, often *cause* disputes, even though the fights are not really *about* the small matters.[1] The world-systems approach, precisely because it is a systems approach, may find itself marginalized if it fails to address some of the issues in contention within the discipline at large.

Again, fieldworkers, whether they be ethnographers, archaeologists, linguists, or ethnohistorians, are quite thoroughly engrossed in the "primary data." Or, more precisely, they are in the midst of whirling, buzzing confusions of people enacting their daily performances. As Radcliffe-Brown (among others) once felt a need to remind us, culture doesn't do things, society doesn't do things, structure doesn't do things, but *people* do things.[2] Even without Radcliffe-Brown's help, at least our brighter ethnographers are quick to notice that people do things. And that leads most of us to wonder *"Why?* Why do those people *do* things?"

Ethnography draws us into the problems of *agency,* especially now that the long Boasian tradition of cultural determinism has lost its steam. To "explain" human behavior as a product of culture or cultural rules is simply to rephrase the question. It would seem reasonable to expect general theory of any sort to offer some accounting of the mechanisms, processes, or fundamental causal connections that link it to actual human behavior. Theory, above all, is supposed to tell us why, but it still needs to translate that so that it may tell us *who* does *what.*

Since I too am surrounded by the swirling kaleidoscope of people *doing* things, I have recently been looking more at the colors they display, the signs, the flags and banners, the gestures. It is not semiotic theory that leads me to this, but Aristotle. I look for the little things that people contest in lieu of the big things. I find them sometimes before I step out the door. For example, I almost never wear a necktie, yet I have chosen to do so on a few occasions. Only recently have I been driven to the agony of the tie as a *political* sign. If I wear a tie, would anyone think I'm Republican? I don't think anyone would make that mistake, but it didn't really matter until Newt and Trent and Jesse invaded not only my nightmares but even my wardrobe.

My decision on whether to wear a tie can, of course, be connected to world system considerations. My tie ties me to J. Crew, who tells me it is made in the USA, absolving me of complicity with the tyranny in Burma. Nonetheless, the silk comes from unspecified foreign sources, so we're in the world system. We could also explore the economics of tie ownership. However, none of this would have much to do with why I choose to wear or not to wear a tie. That is an agony of another stripe.

Dressing is a form of struggle (this is the Greek meaning of "agony"), whether it be Ongka preparing for his big moka, or the businesswoman dressing for power, or an academic trying not to give a damn. Even if we *don't* give a damn, it still says something about who or what we are and who or what we are not. Even for the unwitting, in many urban areas in the U.S. clothing choice may be a matter of life or death. Although athletic wear can be expensive enough to attract the odd armed robber, I do not think economistic orientations carry us very far toward understanding youth violence.

Although the struggle, the agony, may start from a piece of clothing, a gesture, a word, or even a color, everyone knows it is not really *about* the small stuff. It is about the big stuff, even if the participants themselves are not always sure just what that is. But then trying to uncover that is why we have anthropologists.

What is at play, what is at stake, is part of *identity.* No one sets out to be Everyman, but instead to be someone or part of something in particular (even if that means being part of a large group or organization that limits apparent individual differences). The approach I would suggest does not intend to center on the issue of how individual identity develops, but looks instead to *group* identities.

Sometimes group identities may be apparently as low-key as necktie choice. For example, we may find people in southwestern Madagascar who say they are distinct from other Malagasy because "they pronounce 'I', for example, in positions where other people pronounce 'd'. Thus, the *Gasy* words for 'taboo' and 'wife' are respectively *faly* and *valy* and not *fady* and *vady"* (Eggert 1986:331). Others may, given other circumstances, be more vehement: "We are Cheyenne, and all the shit of the world can't change that" [from the film *Powwow Highway*].

Group identity requires differentiation from others who may appear to be very similar, or who may in fact share a common recent history. From an emic perspective, the stakes may be higher precisely because the differences are so slight (or at least initially so) from an etic perspective. This makes for big fights over small stuff. The term I would use for groups in conflict not because they are greatly different from one another, but instead because they are in many ways similar is *faction.* As Elizabeth Brumfiel argues,

> factional competition is implicated in developments as diverse as the spread of ceramic technology and maize agriculture, the origins of permanently instituted leadership offices, the expansion and collapse of states, and the European domination of indigenous New World peoples (1994:3).

Studying factional competition is one way to take us from the "primary data" of ethnography (and we can hope to spot its correlates in archaeology as well as in the archives) directly into world-systems issues. It draws our attention to the importance of the small stuff that might be dismissed and overlooked from an economistic perspective. Even if we as academics are not easily impressed with fashion (but that is one of the things we use to mark our status), we cannot say that those athletic shoes, those designer labels, those colors don't matter. Signaling identity or membership places a premium on access to special markers —objects, signs, and symbols that are not available to just *anyone.* Access may be restricted in a number of ways, but one of the most common is to seek markers that are rare because they have come a long distance. That long-distance trade in "preciosities" is important in elite competition and display is no longer news. I mention it now as one example of how studying factional competition gives us processual links between ethnography and world-systems theories.

A further example of the value of exploring factional competition is that it offers a correction to some of the Eurocentric assumptions that may still be associated with world-systems theory. Hall, among others, notes the Marxist ancestry of world-systems theory and its continuity as left analysis. One important critique of classical left analysis is the concept, or assumption, of *class solidarity.* As should have been painfully apparent even in Marx's own time, "class solidarity," if it exists at all, repeatedly fails to transcend national, ethnic, or even local boundaries. We might offer the counterargument that conflict is *more* likely between persons or groups sharing similar conditions than between those in differing situations (Brumfiel 1994).

Factional competition between groups sharing many similarities may then intensify the politics of identity and reputation (Herzfeld 1987). This increases the value of signs of *difference,* and, in time, may allow a budding off of a "new" group. Especially if such a new group is able to claim its own territory, it may then form the core of an *ethnicity.*

Ethnogenesis may then result from processes I described earlier under the rubric of the anthropology of meaning. In other situations, it may also be understood in terms of adaptive radiation, as a parent group moves into new environment and smaller groups bud off into their own niches. This latter ethnogenesis process would come under the rubric of the anthropology of adaptation. Whatever the process promoting differentiation from prior commonality, the result is a *structural* change.

Ethnogenesis then increases the number of players in competition. Where once everyone was alike, and everyone pronounced their d's as d's, now we find *different* people, who pronounce *their* d's as l's, and for that (among other things)

they may believe they are a better people. In time, the differences appear to harden into essences. In time, they are taken as coming from time immemorial. In time, they become, as Bourdieu puts it, things that go unquestioned because they come unquestioned.

In time, then, what were once intra-group relations become *intersocietal* relations, and we are brought back to the threshold of world-systems theories. The path I have outlined is rooted in what we may observe on the ground ethnographically. It does not begin with system, but with human action, human *agency* in the context of structures shaping and shaped from that agency. The focus on factional competition draws our attention to contests over group boundedness, which may then be discussed in such terms as

1. standoffs, peer polity interactions;

2. domination, hegemony, standoff, and varying terms of incorporation in world-systems;

3. adaptive radiation and ethnogenesis.

I would also emphasize that such an approach is neither economistic nor idealist. By exploring what people *do,* particularly on behalf of factional competition and the politics of identity, we find that in some cases substantial material interests are at stake, while in others the crucial markers may be less tangible.

To return to the original question of whether world-systems theory "works," and how well it fits the chapters in our volume, my general reading of the chapters is that the fit ranges somewhere from too damned baggy to too damned tight, with few reports of much in between.

Complaints of baggy fit would surely be expected if world-systems theory is seen as applicable to *any* and *all* intersocietal interactions. What then is *not* a case for world-systems theory? On the other hand, complaints of too-tight fit would be expected if world-systems theory requires all the baggage associated with the quest for comprehensive theories of capitalism. Complaints about the rigid and often Eurocentric expectations of world-systems theory seem to be based largely on older versions of world-systems theory. Again, I see no need to repeat what Hall has stated so clearly and fully in his contribution. Critiques of world-systems theory need to address the recent incarnations of world-systems theory, including especially Chase-Dunn and Hall's recent work on *Rise and Demise: Comparing World-Systems* (1997). A great deal of new work has been done to get beyond the Euro/core centric bias of world-systems theory. Let us use it, and continue to

work on the fit. For this we especially need contributions from the people engrossed in the primary data in ethnography, archaeology, and ethnohistory.

For example, Alexander's paper seems to suggest a fit that is simultaneously too loose and too tight! She cites Barbara Price's complaint that world-systems theory is loose in identifying specific archaeological correlates. She then proceeds to argue that in her study area in the Yucatán the expectation from world-systems theory that we should find core dominance and greater marginalization, or "disenfranchisement" in the periphery apparently does not hold.

However, here, as with several of our other chapters, I would suggest caution with regard to just what "expectations" we derive from world-systems theory. Perhaps "Classic" world-systems theory may lead to expectations of the inevitability of core dominance or hegemony at local levels, but this may well be a straw man argument in the light of the "New Formula" world-systems theory. Chase-Dunn and Hall, for example, and especially in *Rise and Demise* (1997), have addressed many of these issues and have certainly carried world-systems theory far away from dogma and far toward an empirically testable research program.

Alexander's paper is one of an increasing number of contributions that document a variety of *degrees* of incorporation, standoff, or perhaps indifference in world-systems encounters. From this point it seems no longer appropriate to argue the failings of world-systems approaches based on earlier formulations.

Certainly, as Alexander observes, it is important to consider the significant role *local* conditions play in world-systems interactions. This is one of the most important contributions anthropologists and archaeologists as fieldworkers may contribute toward the ongoing revision of theoretical approaches. The bottom-up approach of ethnography and archaeology is crucial for correcting any top-down bias still latent (if not dominant) in world-systems theories.

Mark Shutes also underscores the importance of tailoring world-systems theory from the bottom up: "It is frequently the case that those who exhibit an acute interest in ethnography are often chary about the use of broad-based theories to explain the incredible richness and diversity of *human behavior* that they encounter in their work" (p. 33, emphasis added).

By focusing on local production strategies, Shutes centers our attention on human action and thereby demystifies the focus on *systems* behavior endemic in systems approaches. By comparing two different regions within the European Union, he documents the different conditions of incorporation contested and negotiated at local levels. By doing so, he explores not only the diversity in

world-systems interactions, but puts human agency at the center of our view rather than at its periphery.

As Robert Jeske explores the question, "does it [world-systems theory] work?" for the Mississippian, the response seems to be a qualified "Maybe ... if." Much of the qualification is consistent with Alexander's complaint that the archaeological correlates of world-systems theory still need clearer definition. As Jeske puts it, we still need to sharpen "how to devise testable hypotheses that would differentiate a world-systems approach from other concepts such as interaction spheres" (p. 216). Jeske urges particular attention to problems of geopolitics and logistics in intersocietal power relationships. In concert with Stein, Jeske argues that "power distance decay" is a crucial problem for any claim of core coercive power over peripheral areas. Given ancient transport technologies, we must not overlook the severe limitations on long-distance power projection in archaeological cases.

Kuznar finds, as I have myself, that the military-expansionist Inca state offers promising terrain for world-systems analysis. The archaeological and ethnohistorical evidence allows us to see expansion from Cuzco across a variety of regions that were home to a considerable variety of ethnic polities. One of the most intriguing aspects of the Inca case for world-systems theory is that, as Kuznar quotes Morris and Thompson (1985:165), "The Inca polity . . . appears to have emphasized the maintenance and manipulation of diversity rather than an attempt to integrate through the creation of cultural uniformity" (p. 229).

This offers intriguing opportunities for exploring a multiplicity of ways that incorporation or resistance may be played out in different regions. As Kuznar explores some of these, he raises important questions regarding the role of not only material but *ideological* interests. Several of our participants have criticized a bias in world-systems theory (though I would suggest world-systems theory of an older vintage) toward material exchange as the central dynamic. Again, by exploring the role of ideological contest and factional competition we may hope to gain greater insights on human agency than might be afforded through excessively economistic approaches.

Kardulias draws together a number of these themes as they apply to the Aegean. With Shutes and Alexander, he draws our closer attention to changes in *production.* Reprising a common theme in these papers, Kardulias urges us to break out of economistic shackles. As we see argued also in Chase-Dunn and Hall, and as he cites Edens (1992), "trade is just one facet of core-periphery relations and cannot be comprehended without consideration of warfare, diplomacy, cultural hegemony, and the social contexts of production and consumption" (p. 192).

As he traces multiple levels of interaction in the Bronze Age world-system, Kardulias again underscores the *variety* in world-systems interactions, so that it is not simply a unidirectional incorporation into a world economy. In doing so, Kardulias makes perhaps the strongest case for making a fit between local cases and world-systems theory. First, he leaves behind the struggle to force early versions of world-systems theory to fit cases they were not designed to cover, but instead suggests appropriate corrections as well as building upon other reformulations such as those offered by Chase-Dunn and Hall. Second, the Aegean is a particularly promising region for world-systems analysis in part because sea transport allowed movements (including bulk goods) and contacts otherwise difficult or precluded in other ancient polities.

A world-systems analysis of the Aegean allows us to transcend some of the insularity that has afflicted some of the traditional historical discussion of the region. Some of our predecessors seem to have resisted the notion that Greece even was connected to a wider world! More recently Walter Burkert has commented that, "The 'miracle of Greece' is not merely the result of a unique talent. It also owes its existence to the simple phenomenon that the Greeks are the most easterly of the Westerners (1992:129).

From this, perhaps it would not be such a great step to reach the observation of world-systems theorists such as Andre Gunder Frank and Chris Chase-Dunn that in fact the Greeks were simply the most westerly of the Easterners!

As I suggested above, we should expect enthusiasm for world-systems approaches to be tempered among anthropologists and archaeologists for reasons related both to their groundedness in particular ethnographic or archaeological sites and to their varying positions on questions of system, structure, meaning, and agency. Before closing, I would like to add a few comments on two of the contributions that raise broader questions concerning some of the theoretical differences and preferences among anthropologists.

As we see in Hall's contribution, as well as in many recent contributions to world-systems work from non-anthropologists, the issue of long-term cycles or "evolutionary pulses" in the world-system draws considerable interest. Sociologists, political scientists, economists, historians, and scholars of comparative civilizations have addressed issues of historical cycles such as we see in the contribution from Modelski and Thompson. Few, if any, anthropologists or archaeologists have demonstrated enthusiasm for such approaches. One reason for this may be skepticism concerning the quantity and quality of data mobilized to make arguments concerning such cycles. Even the most nomothetically inclined anthropologists or archaeologists hesitate to stretch

detailed understanding of specific places and times into such sweeping movements.

Another reason for hesitation to engage in this form of world-systematizing may come from what most anthropologists consider a great and embarrassing failure, Alfred L. Kroeber's monumental *Configurations of Cultural Growth*. This was perhaps the most sweeping effort in the comparative study of civilizations ever undertaken in anthropology, and it has remained a warning against the hubris of undersubstantiated pattern-mongering. However, Kroeber's student, Julian Steward, presented a seminal contribution in his paper on "Cultural Causality and Law: A Trial Formulation of the Development of Early Civilizations," (1949) which, in my view at least, made a successful argument for parallel processes in the growth of civilizations in both the Old and New World. Steward's work in making careful comparisons between civilizations has remained influential for those who still follow nomothetic strategies in exploring the rise and fall of civilizations. Although Steward raised periods of cyclical conquests in his discussion, it may be that Kroeber had already poisoned the well on this issue, leaving subsequent generations with no thirst for cycles.

Suspicion of grand-scale systems is not simply to be expected from anthropologists who have been taken in by the cult of postmodernist "theory." In fact, much of our reconsideration has been in response to the inherent contradictions and absurdities in the very relativism many postmodernists wallow in. One such contradiction is the premise that each "culture," "people," "society," or "group" however defined, has its "own" truths, values, world views and all are valid. However, this implies that whatever the unit may be, it has a shared and integrated "culture." In other words, this takes us back to the billiard ball! Philosophers as well as anthropologists are now questioning what many now refer to as the "myth of cultural integration" (see, for example, Archer 1996 and Moody-Adams 1997). Old anthropology textbooks describe culture as shared and integrated. Current discussions are more inclined to describe culture not as *shared,* but as something people *participate* in, with different and often contested understandings and interests. Similarly, we may no longer take as given that "culture" is integrated.

With cultural integration as a question rather than as a given, we also throw into doubt just how systemic culture is. If we increasingly surrender the notion that culture is systemic at the local level, why should we be more confident that we are seeing systemic relations at more global levels?

For this reason, Stein's admonition that "we cannot simply assume that every network of connections between societies forms a world-system" and that "we should stop assuming a priori that world-systems are systems" will surely

resonate among anthropologists (pp. 154, 160). However, I would also think it fair to note that the revised forms of world-systems theory is much more empirical than a priori.

Stein offers a number of fierce criticisms of world-systems theory, including overemphasis on external dynamics "while ignoring or minimizing internal dynamics in the so-called 'periphery'," and an assumption of core dominance that denies agency to the periphery. However, these criticisms, seen also in some of the other chapters, are directed largely toward the older versions of world-systems theory. Stein then acknowledges that the "modified" world-systems perspective presented largely in the works of Chase-Dunn and Hall has liberated itself from such crippling assumptions. However, in doing so, according to Stein's argument "They have eliminated its specificity as an explanatory construct and reduced the term 'world-system' into little more than a shorthand for 'interregional interaction system'" (p. 158). And, he argues, "Note that even in this revised form, external dynamics predominate: 'we claim that the fundamental unit of social change is the world-system, not the society' (Chase-Dunn and Hall 1993:851)."

Stein's comments reflect how many anthropologists and archaeologists move from their grounded experience in particular field settings toward broader theoretical questions concerning interregional interactions (systemic or otherwise). I, for one, certainly do not take these critiques as the last word on the matter, and I do think that much of the ongoing work in the world-systems perspective addresses the questions he raises. Nonetheless, I think they are illustrative of the sorts of critique that we may expect to resonate among anthropologists and archaeologists, who have always been caught between "their" peoples and attempts to systematize and generalize anthropological knowledge.

My own last word on the matter is that the world-systems perspective has been and continues to be one of the most promising frameworks and challenges for addressing anthropological issues in culture, cultures, and Culture. It often appears that anthropologists have ridden these troublesome concepts of culture into the ground. Perhaps in despair, many of our colleagues have leapt upon postmodernist dead horses, but world-systems approaches are still very much front runners!

Notes

1 "Factions arise therefore not about but out of small matters; but they are carried on about great matters." Aristotle, *Politics* V.ii.1. Translation by H. Rackham in Loeb Classical *Library, Aristotle XXI* (Cambridge,Mass.:Harvard University Press, 1990).

2 Radcliffe-Brown's position is somewhat remarkable in view of his own approach to *Structure and Function*, which makes a good argument for the superorganic, despite his insistence that only people are real. This old struggle between individual and superorganic in explanation should warn us that some of these same issues endure in the world-systems approach.

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16

Conclusion

P. Nick Kardulias

The preceding comments have addressed a number of issues raised by the chapters in this volume. Rather than reiterate the process of examining all of the contributions, I take the more limited role of addressing points raised by the comments, in particular the criticisms of Frank who thinks many of the contributors have unduly found fault with WST as an approach. At the outset, let me state that now, 24 years after the publication of Wallerstein's seminal work, is an appropriate time to revisit the terrain scholars have crossed in applying world-systems concepts to a number of scholarly problems. Many, however, still ask whether WST is a viable approach for archaeology and anthropology. What have in fact been the effects in ethnographic and archaeological studies? On the whole, WST has played a highly positive role in providing anthropologists and historical sociologists with a general theoretical framework. The work of Wolf (1982) and others certainly reflects the power and elegance of the world-systems approach. Anthropologists have also provided important critiques of WST (e.g., Schneider 1977). If the chapters in this volume are any indications, and I believe they are, the debate over the utility of general models like WST still goes on and contributes to the continuing refinement of the approach. WST is part of the welcome effort to move away from the models which admit little possibility for cultural comparison and generalization. Having said this, it is important to consider the criticisms of those who see major flaws in WST, even if only to dispute them. While large-scale cultural forces certainly are critical to comprehending events, we must also take account of what individuals do, as LaLone has pointed out in his comments, and several of the chapters demonstrate explicitly.

Since most of the criticisms by Frank and others deal specifically with archaeologists, let me address the issue as a prehistorian. One can certainly argue that archaeologists often take a utilitarian view of theories. We have often been

accused of borrowing theory but not contributing much in return. Frank challenges us in Kennedyesque fashion, ask not what WST can do for us, but what we can do for WST. Frank also poses important questions for archaeologists, much like Edmund Leach (1973) did a generation ago. Leach admonished prehistorians for thinking they can provide as complete a picture of a past society as the ethnographer does for a modern group. In effect, both Leach and Frank accuse archaeologists, with some notable exceptions, of being consumers, but not producers of theory. While there may be some truth to this sentiment, it is far from the entire answer. Our sumptuary habits have also provided important theoretical products. Certainly archaeologists have made significant contributions to the refinement of evolutionary theory (Braun 1987, 1990; Dunnell 1980, 1989; O'Brien and Holland 1990, 1992; Redding 1988; Rindos 1984, 1989; Teltser 1995). Archaeology already has contributed to WST by demonstrating strengths and weaknesses (see, e.g., the important exchange in Frank 1993). Indeed, the greater time depth Hall and Chase-Dunn seek for WST can only come from archaeology, as they acknowledge. On this point I believe all the contributors to the present volume are in agreement. Frank raises critical questions for archaeologists in *how* they go about their business, and it is here where some differences in opinion arise.

I find appropriate Frank's initial division of the issue into two questions: (1) what can archaeology do for WST, and (2) vice versa. While in general I would agree that most of the chapters concern the second question, some at least address, even if indirectly, the first question. For example, my point in talking about multiple levels in the Aegean Bronze Age was to suggest that we cannot view such systems in monolithic terms, even for the prehistoric past. Several of the other papers make the same point, and in doing so I think bolster some of the issues Tom Hall brings out in his chapter. Archaeological research by its very nature is particularistic, because of the necessary focus on artifacts and features within a site. This, however, I think benefits the elaboration of WST because in putting the individual data into some meaningful whole, archaeologists often look for a generalizing/generalizable approach for which the nature or range of variation in types, behaviors, etc. is instructive. To my mind at least, the relationship between WST and archaeology (or any other discipline) is almost from the outset interactive and mutually supportive. WST needs to account for variation or archaeologists, cultural anthropologists, and many others will have no truck with it. Frank is right in stating that a number of the contributors do not see this beneficial relationship, or question the utility of WST for their data sets. But I do not think it is entirely true that none were trying to help build theory; it seems to me that those authors who try to do so at some level could make the point more explicitly in the future.

Another very important, maybe the most significant, issue Frank raises is the notion of human agency. He is absolutely correct in observing that some of the authors hesitate to adopt WST because they wish to stress the role of individuals rather than view people as at the whim of forces beyond their control. For me, this is the central debate in anthropology and in the social sciences as a whole. The question is crucial: so which is it, are people in control of their individual lives or not? I understand the hesitance of Stein and others in adopting WST because anthropology (and virtually every other social science) has dealt with this issue almost continuously with little comfort for the intellectually weary. At one time, the view was of individuals all acting separately in a sort of Hobbesian nightmare of competition. Then in the U.S. the culturologists argued society (or structure, for some functionalists) governed all. Even with some sophisticated modifications, many people attacked the New Archaeology processualists, who argued one can determine universal laws of human behavior, as obscuring or even losing the role of individuals in the past. Unfortunately, many of those who now talk about individuals in the past go off on postmodern tangents and discuss symbolic elements to the exclusion of the concrete, pragmatic things people must deal with first. I think WST can accommodate the role of individuals within the larger context; this is what I tried to demonstrate in my paper on the fur trade (1990), and I think this is the same point Hall (1986, 1987, 1989) makes in his various writings about how incorporation functions. Here I disagree with Stein and others that WST does not allow room for individuals to maneuver (Morris also deals directly with the issue in his paper by demonstrating that Greeks negotiated the nature of their interaction with Near Eastern cultures). But I also think we can overemphasize the impact of the system; while I understand Frank's point that the WS sets the parameters or constrains what people can do, people still have to make decisions. The key question concerns the generative source of economic and other motivations. Frank suggests we look from the outside in. But it is clear that we have to consider internal dynamics, elements of individual desire, and personal agendas. I think WST offers a way to accommodate the individual within the social.

Beyond these general issues, there were one or two particular points I wanted to address. First, in discussing the "B" phases as equivalent to or synonymous with "Dark Ages," Frank gives as a third example the "near simultaneous crisis and decline from A.D. 200 to A.D. 500 of Han China, . . . and Imperial Rome." As we know, the decline of the Roman state has been a tremendously hot issue for many years. What the archaeological work of the past two decades in Greece, Anatolia, and other Mediterranean regions shows, however, is that the Late Roman period (fourth to late sixth/early seventh centuries A.D.) was generally one of considerable prosperity, with site numbers that rival those of the Classical

period. This finding was something of a shock to historians and others who subscribed to the work of Gibbon and various ancient authors as evidence; the results of these archaeological surveys are reported in Cherry et al. (1991), Jameson et al. (1994), and other reports. The point is that while there are general cycles of expansion and contraction, archaeological research can alert us to some anomalies and help us refine WST.

One issue which Frank mentions but does not dwell upon, but which is of considerable importance to most of the contributors, is the multidimensionality of core-periphery distinctions. While it is true that the political and ideological components deserve greater attention, even the economic dimension has not been fully explored yet. In particular, the role of production has not received as much attention as trade or exchange; some recent studies attempt to redress this oversight; Wells and Shutes consider such issues. WST is an appropriate perspective to help us investigate the roles or functions of peripheries and semi-peripheries. That is, is it valid to think of the areas on the edges of the core(s) as those locations where innovation occurs most rapidly. For the sake of argument, if we borrow some ideas, albeit crudely, from evolutionary biology, which suggests that most genetic change occurs at the margins between two populations where there is the greatest exchange of different genetic material (if I may push Hall's points about WST and evolution), can we envision accelerated cultural exchange and transformation at the contact points (actually, areas of overlap) between core and periphery? In other words, does innovation derive from the center or the margins? If there is some evidence to support the latter, how can WST address this issue?

The chapters in this volume have attempted to address these and other key issues. The adoption of WST by anthropologists, sociologists, and historians demonstrates the broad applicability of this approach across time and space. WST provides a common framework within which scholars from various disciplines and with interests in diverse geographical zones and chronological periods can engage in a dialogue about recurring patterns of interaction among various cultures. WST, with its potential for studying past and present cultural interaction, continues to yield bountiful interdisciplinary fruit.

The main purpose in organizing the symposium and this volume has been to stress the interdisciplinary potential of WST for studying past and present cultural interaction which can occur along political, economic, and social dimensions. The subtitle of this volume reflects the efforts of students of the past and present to develop an interactive model of social contact the effects of which range from mutually beneficial to exploitative. In addition, several of the authors demonstrate that some WS scholars overemphasized the role of exchange; leaders generate

and manipulate demand and supply to fulfill political goals. Levels of production underlie any system of exchange and provide a vital element in any world-system (see Wells, this volume). What archaeologists and ethnographers can provide is an understanding of the cultural matrix within which such interplay occurs. On this point I believe all can agree. Some scholars emerge from the effort to use such a general model with a deeper appreciation and use for WST, while others find the perspective lacking in serious ways. The differences lie in the assessment of how best to gain such an appreciation. The interlocutors in the present exchange all gained from the effort to utilize or evaluate WST, despite the sometimes significant differences among them. It is evident to me that the gap between these several viewpoints is not unbridgeable. After all, world-systems consist of individuals in structured, but not completely inflexible, relationships.

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Index

aclla
Aegean migrations in
Aeschylus
Africa
Afro-Eurasia
agency
Alexander the Great
allocative resources
Al Mina
Amazon
American Bottom
Amorites
analogy
Anatolia
ancillary features
anthropological perspectives
anthropologists
anthropology
Apollodorus
Arabia
Arab expansion
Arafat, K.
archaeologists
archaeology
Argos
Armenia
Asia central southeast southwest
Asine
Assyrians
Athens
Attila
authoritative resources
autonomy

Aymara
Aztalan
Aztecs

Babylonia
ballcourt
ballcourt markers
beliefs
Bering Strait
Bernal, M.
Black Sea
boundaries
bounding
British Isles
bronze
Bronze Age Aegean migrations
Brun, P.
Budapest
bureaucracy
burial
Burkert, W.

cabecera
Cacalchen
cacao pod effigies
cache
Caddoan
Cahokia
Calumet
camayos
capitalist world-system
captives
Carniero, R.
carrying capacity
Carthage
Caste War of Yucatán
Catholicism
Celtic: migrations threat
Celts
centers
central Asia. *See* Asia, central

Cetelac
Chalcis
Chernykh periods
Chernykh thesis
Cherry, J.
chiefdom
China migrations into southern
chupachos
Church, Catholic
circumscription
cities
civilizationists
class
Coldstream, N.
collapse
colonial architecture
commercialization
commoners
community
conceptual schemes
conquest
Copan
copper
core Aegean Mesoamerican South American
core-periphery hierarchy relations differentiation
Cos
cosmology
craft production
Crawfish River
credit
Crete
Crusaders
cult
culture
Cuzco
Cyprus

Dacia
Danube
Davis, J. L.

deconcentration
deconstructionism
dependency relations
Dickson Mounds
Dietler, M.
diezmo (tithe)
differential core-periphery
disenfranchisement
Distance-Parity model
diversification

Egypt
Elam
elites
empire
encroachments
environment
ethnicity
ethnoarchaeology
Europe eastern North European Plain western
evolutionism
exchange
exploitation
exports

factions
falcon
figurines
Finley, M.
Fisher site
Fort Ancient
Frank, A. G.
frontier

gardening
gender
Genoa
geography
Giddens, A.
globalization
glocalization

Grand Village of the Kaskaskia
Great migrations
Greece
Guchen
gunpowder

Habermas, J.
hacienda
Han Empire
hegemon
hegemony
Helvetii
henequen
Heroes
Hesiod
hierarchical core-periphery
hierarchy
Hinduism
hinterland attacks incursions
Homer
horticulture
household
Hsiung-nu
Hungary
Huns

ideology
Illinois River
imports
Inca Empire
Inca
incense burners (*incensarios*)
incorporation
independent *rancho*
Indo-European
Indus River valley
insularity
international relations
interregional exchange
interregional interaction
Iron Age

Iroquois
Israelites
Italy
Ixtepeque

Jordan

Kanesh
Kansu
Kassites
Knossos
Kommos
Korea
Koukounaries
Kuhn, T.

labor
land stress
Langford, G.
Late Classic (Mesoamerica)
Late Woodland
La Florida valley
La Sierra
La Venta valley
Lefkandi
legitimacy
legitimation crisis
Liao
Lohman Phase
Long-nosed god masquettes
long cycle theory
luneros (sharecroppers)
luxury goods

Macedonia
maize agriculture
margin; Sherratt's concept of
marine shell
market
masonry
Maya
McNeill, W.

meaning
meat trade
Medieval Europe
Mediterranean
Melos
Mesoamerica southeast
Mesopotamia
metal
Mexico City
Meyer, M.
Middle Preclassic (Mesoamerica)
Mill Creek chert
Minoan
Mintz, S. W.
Mississippian Middle Mississippian Upper Mississippian
Mississippi River
mitmaq
Modelski-Thompson periodization
mode of production
Mongols
monopolies
Monte Albán
Mopila
Morgan, C.
Morocco
mortgages
Moundville
Mound
multiethnic states
Mycenae

Naco valley Sites 337 and 426,
Naxos
Near East
negotiated peripherality
Neolithic
New Spain
Nichoria
nomadic seepage
Norris Farms #36

obsidian
ocarinas
Ohio River
Oneota
oscillation

Pacific Ocean
palace economy
Palestine
Pamirs
panaca
Pannonia
paradigm
Parthia
pathogens
periphery Aegean Mesoamerica
Persia
Peru
Petra
Philistines
Phoenicia
Picts
Polanyi, K.
political centralization
political science
Polybius
population; growth nucleation
postmodernism
power and trade in Aegean Iron Age in Inca Empire in Mesoamerica in Mississippian period in Roman Europe on Tonga vacuum
precapitalist
prestige goods
primate settlement system
primitivism
principle of least effort
production organization
pueblo
pulsation

quintas
quipu

Quirigua

race
Ramey Incised pottery
religion
resistance
resources,
Rhine
Rhodes
rise and demise
ritual
Rome
Rostovtzeff, M.
Russia

sacred
Scotland
sculpture
Sea Peoples
semi-periphery
Shang
Sherratt, A.
Sicily
Sierra de Omoa
Silk Roads
site hierarchy
site structure
Skyros
slavery slaves slave trade
Snodgrass
social evolution
Southeast Asia. *See* Asia, southeast
Southeast Mesoamerica. *See* Mesoamerica, southeast
Southwest Asia. *See* Asia, southwest
Soviet Union
Spain
Spanish Conquest
Spiro Mounds
Spondylus
states and nomadic incursions Bronze Age Aegean MesoamericanNorth America (Mississippian) South America

Stirling Phase
Story of Wenamun
structural interdependence
structural power
style
subsistence
substantivism
sugar
Sula Plain
Sumer Sumerian Sumerian movement
surplus surplus value
symbolism
symbols
Syria
system logic

Tarim Basin
taxation taxes
technology
temple
Teotihuacan
Terminal Classic (Mesoamerica)
terreno baldío (vacant land)
Thebes
Thorikos
Thucydides
thunderbird
Tien Shan
Tiryns
Tonga Tu'i Tonga
Trade Diaspora model
trade routes
Tremaine Site
tribes
tributary states
tribute in Inca Empire
Troy
turban
Turfan
Turkistan

Turks
Tyre

Ulu Burun
underdevelopment
unit of analysis
uprisings

vents
Vienna
Vikings
visitas pastorales

Wallerstein, I.
warfare
Warring States period (China)
Weber, M.
Weiner, M.
western innovations
whistles
Wolf, E.
workshops
world-systems (also world systems) Aegean Andean/Inca criticisms of defined Mesoamerican Roman theory (WST)

yanaconas
Yaxcabá
Yucatán

About the Contributors

Rani T. Alexander is an Assistant Professor in the Department of Sociology and Anthropology at New Mexico State University. Her principal research interests include Mesoamerican archaeology and colonial political economy, especially of the Late Postclassic and Colonial periods on the Yucatán peninsula. Address: Department of Sociology and Anthropology, MSC 3BV/Box 30001, New Mexico State University, Las Cruces, New Mexico 88003. Email: raalexan@nmsu.edu.

Gary M. Feinman is a Professor of Anthropology at the University of Wisconsin-Madison. He has conducted extensive archaeological field research (both systematic regional surveys and house excavations) in Oaxaca, Mexico. Address: Department of Anthropology, University of Wisconsin-Madison, 1180 Observatory Drive, 5240 Social Science Building, Madison, Wisconsin 53706-1393. Email: gfeinman@facstaff.wisc.edu.

Andre Gunder Frank is on the Graduate Faculty of Sociology at the University of Toronto and Professor Emeritus of Development Economics and Social Sciences at the University of Amsterdam. His publications in 27 languages include 136 editions of 37 books, 158 chapters in 134 edited readers or anthologies, and articles in about 600 issues of periodicals. His books include *Capitalism and Underdevelopment in Latin America* (1967), *World Accumulation 1492-1789* (1978), *Crisis in the World Economy* (1980), *Transforming the Revolution: Social Movements and the World-System* (1990 with S. Amin, G. Arrighi, and I. Wallerstein), *Underdevelopment of Development:An Autobiographical Essay* (1991), *The World System: Five Hundred Years or Five Thousand?* (1993, with B. K. Gills), and *ReORIENT: Global Economy in the Asian Age* (1998). Address: 250 Kensington, Westmount, Quebec, Canada. Email: agfrank@chass.utoronto.ca.

Thomas D. Hall is Lester M. Jones Professor of Sociology at DePauw University. His works include *Social Change in the Southwest, 1350-1880; Rise and Demise: Comparing World-Systems* (with Christopher Chase-Dunn); and numerous articles and chapters. He is currently editing *The World-Systems Reader*

(for Rowman & Littlefield). He has a continuing interest in state-nonstate relations within a world-systems context, especially in North America and Southeast Asia. Address: Department of Sociology, DePauw University, 100 Center Street, Greencastle, Indiana 46135. Email: thall@depauw.edu.

Robert J. Jeske is Associate Professor of Anthropology in the Department of Anthropology, University of Wisconsin-Milwaukee. He has conducted field research principally in the southern Great Lakes region of the United States. His research interests include lithic analysis, as well as social and economic interactions among Late Prehistoric and early Historic period populations in the American Midwest. Address: University of Wisconsin-Milwaukee, Milwaukee, Wisconsin 53201. Email: jeske@uwm.edu.

P. Nick Kardulias is Assistant Professor of Anthropology and Archaeology at the College of Wooster. His research interests include Mediterranean and North American prehistory, exchange systems, lithic analysis, and the application of anthropological theory to Aegean archaeology. Address: Department of Sociology and Anthropology, Kauke Hall, College of Wooster, Wooster, Ohio 44691. E-mail: pkardulias@acs.wooster.edu.

Lawrence A. Kuznar is Associate Professor of Anthropology at Indiana University-Purdue University-Fort Wayne. Kuznar has conducted ethnographic and archaeological research among pastoralists in both the Andes and North America, particularly concentrating on the economic and ecological dynamics of herding systems. Address: Department of Sociology and Anthropology, Indiana-Purdue University at Fort Wayne, Fort Wayne, Indiana 46805. E-mail: kuznar@ipfw.edu.

Darrell LaLone is Professor of Anthropology at DePauw University. His research centers on political economy of the Inca Empire, though his larger interest in comparative study of long-term social change has led to additional field studies in the Maya region, Greece, Vietnam, and Madagascar. Address: Department of Sociology and Anthropology, DePauw University, 100 Center Street, Greencastle, Indiana 46135. Email: dlalone@depauw.edu.

George Modelski is Professor of Political Science Emeritus at the University of Washington. His most recent book is *Leading Sectors and World Power: The Coevolution of Global Economics and Politics* (1996, with William R.

Thompson). His current research interests include evolutionary world politics, world system history, and ancient world cities. Address: Department of Political Science, University of Washington, Seattle, Washington 98195. Email: modelski @u.washington.edu.

Ian Morris is Jean and Rebecca Willard Professor of Ancient History and Archaeology at Stanford University, and Chair of the Classics Department. He is author of *Burial and Ancient Society* (1987), *Death-Ritual and Social Structure in Classical Antiquity* (1992), and *Archaeology as Cultural History* (1999). He has excavated in Greece and Britain. Address: Department of Classics, Stanford University, Stanford, CA 94305-2080. Email: imorris@leland.stanford.edu.

Peter N. Peregrine is Assistant Professor of Anthropology at Lawrence University. His interests include anthropological theory, the origins of complex society, and the integration of archaeology and ethnology. He has conducted fieldwork in the Midwestern United States and in the Near East and is at present working with the Human Relations Area Files to develop resources for comparative research in archaeology. Address: Department of Anthropology, Lawrence University, Appleton, Wisconsin 54912. Email: peter.n.peregrine@lawrence.edu.

Edward M. Schortman is Professor of Anthropology at Kenyon College. He has conducted archaeological field research in Mexico, Guatemala, and Honduras since 1972, the nine most recent field seasons being devoted to co-directing investigations in the Naco Valley, Honduras. Schortman is particularly interested in the manner in which emergent social leaders manipulate resources obtained from beyond the borders of their own societies to create and maintain political hierarchies. Address: Department of Anthropology and Sociology, Olof Palme House, Kenyon College, Gambier, Ohio 43022. Email: schortma@kenyon.edu.

Mark T. Shutes is Associate Professor of Anthropology at Youngstown State University. His interests include economic anthropology, agricultural production schemes in Europe (with a focus on Ireland and Greece), and comparative ethnographic analysis. Address: Department of Sociology and Anthropology, DeBartolo Hall, Youngstown State University, Youngstown, Ohio 44555. E-mail: f0027692@cc.ysu.edu.

Gil J. Stein is Associate Professor of Anthropology at Northwestern University. He has excavated and surveyed in the American Southwest (Arizona and New Mexico), Syria, and most recently in Turkey (since 1981). His main research interests focus on the development of complex societies in Greater Mesopotamia and the archaeology of colonial systems. He has also conducted research on the economic organization of state societies, craft specialization, Neolithic subsistence systems, and zooarchaeology. He has written over 35 journal articles, book chapters, and reviews, and is the co-editor (with Mitchell Rothman) of *Chiefdoms and Early States in the Near East: The Organizational Dynamics of Complexity*. Address: Anthropology Department, Northwestern University, Evanston, Illinois 60208. E-mail: g-stein@nwu.edu.

William R. Thompson is Professor of Political Science at Indiana University and Managing Editor of *International Studies Quarterly*. His current interests encompass interstate rivalries, interpreting the "democratic peace" phenomenon, evolutionary approaches to world politics, modeling global political economy processes, and mapping Eurasian pulsations since 4000 B.C.E. Address: Department of Political Science, Indiana University, Bloomington, Indiana 47405. Email: wthompso@indiana.edu.

Patricia A. Urban is Professor of Anthropology at Kenyon College. She has pursued archaeological investigations in Guatemala and Honduras since 1975, co-directing the Naco Valley Archaeological Project since 1975. Urban is particularly interested in the interplay between ethnicity and macroregional interaction processes operating over the long-term. She has investigated this topic using a wide range of Naco Valley materials, concentrating primarily, however, on the study of ceramics. Address: Department of Anthropology and Sociology, Olof Palme House, Kenyon College, Gambier, Ohio 43022. Email: urban@kenyon.edu.

Peter S. Wells is Professor of Anthropology at the University of Minnesota. His principal interests concern late prehistoric and early historic societies of Europe, and issues of interaction, identity, and expression. Address: Department of Anthropology, 215 Ford Hall, University of Minnesota, 224 Church St. S.E., Minneapolis, Minnesota 55455. Email: wellsOOl @maroon.tc.umn.edu.